



*Reducing the rate of teenage conceptions*

# **An international review of the evidence: data from Europe**

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## Foreword

Teenage pregnancy can be associated with adverse social and health outcomes for the young parents and their children.

The Social Exclusion Unit has been asked by the Prime Minister:

*to work with other departments, building on the work already undertaken by the Department of Health, to develop an integrated strategy to cut rates of teenage parenthood, particularly underage parenthood, towards the European average, and propose better solutions to combat the risk of social exclusion for vulnerable teenagers and their children.*

Young people, their parents, teachers, professionals working in health and local authorities, and members of national and local organisations will need to work together to set and implement an agenda for change. Effective and appropriate action must be informed by sound research and evaluation.

What, then, are the current priorities for research? It is important to understand the variation and variability in conception rates in young people by geographical area and by social and cultural background. How does the experience of teenage pregnancy in the UK compare to that of other countries?

Therefore, the Health Education Authority (HEA) has commissioned a number of reviews on teenage conceptions. One of the reviews examines four English-speaking countries – the United States, Canada, Australia and New Zealand. This particular review analyses data from other European countries, examining statistical evidence relating to teenage pregnancy in the whole of Europe and reviewing interventions and policy changes that have been successful in reducing the incidence of unwanted and unintended conceptions.

This work has been supported by the Department of Health. The HEA is delighted to disseminate the findings to encourage further debate and discussion about both practice and policy in this most challenging area.



Professor Pamela Gillies  
Research Director  
Health Education Authority

## Introduction

Britain has both the highest teenage conception rate and the highest teenage motherhood rate in Western Europe. The rate of conception in England and Wales in 1995 was 8.5 per 1000 for girls aged under 16 years and 58.7 per 1000 among 16–19-year-olds. In 1995 over half of the conceptions among 16-year-olds and more than a third of those among 16–19-year-olds were terminated (ONS 1997).

Pregnancy in the teenage years is not biologically harmful in itself. In practice, however, teenage pregnancy has been associated with an increased risk of poor social, economic and health outcomes for both mother and child, which carry significant private and public costs. In turn, low socio-economic position and prospects can be seen as creating situations in which teenage conception is more likely. There may be factors which dispose young people and their families to disadvantage and early parenthood – relative poverty, family conflict, poor educational possibilities, poor employment prospects. In turn, those who are disadvantaged may lack aspiration, role models, expectations and opportunities.

Given the high rates of unplanned and unwanted teenage pregnancy and abortion in the UK, the Health Education Authority (HEA), supported by the Department of Health, has commissioned this research to explore teenage conceptions in the whole of Europe and to review the international evidence for successful interventions and policy changes in reducing the incidence of unwanted and unintended conceptions, with a view, ultimately, to providing guidance on good practice in service provision and policy.

### Aims

This study aims to review the statistical evidence relating to teenage pregnancy in Europe, highlighting situations which are relatively more or less favourable to reducing the rate of teenage conceptions, and identifying possible contributory factors.

### Objectives

The research objectives are as follows:

- To examine variations in teenage conceptions and their outcome in Europe, paying attention to countries in which rates are notably lower or higher than in the region as a whole.
- To identify factors associated with trends and variations in teenage conception rates in Europe.
- To examine the relationship between teenage fertility and policy, legislation, economic factors, educational prospects and service provision.
- To amass evidence of effectiveness of measures to reduce teenage conception rates.

### Research methods

- Liaison with other agencies, both individual and organisational, working in the field of teenage pregnancy\* has guided the use of data sources for the project (Appendices 1 and 2).
- A literature search, using electronic databases (Popline, Medline and BIDS), identified factors with the potential to interact significantly with teenage fertility.
- Data on teenage births and abortions were obtained from official sources, notably the UN Demographic Yearbook and the Council of Europe.

\*Rupert Walder and Lynn Thomas, The European Office of the International Planned Parenthood Federations; Doreen Massey, Independent Consultant; Daniella Luciani, European Office of WHO in Copenhagen; Alison Fourie, Marie Stopes International; Franco Millich, Council of Europe; Becky Wood and Penny Babb, Office for National Statistics; Perter Brierly, Christian Research; Sally-Ann Goold, Church House; Freda Denby, University of Durham; Kim Youngs and Sharon Bolton, University of Essex; Stephen Sharp, Statistician at LSHTM; and Pamela Gillies, Adam Crosier, Dominic McVey and Catherine Swann, HEA.



- Data on social, economic, demographic and political factors (Appendix 3) were collated from official sources, including reports commissioned by the EC, ILO, WHO and UNICEF.

## Presentation of the data

The variables of principal interest in this study are as follows:

- Live birth rate to women aged 15–19 per 1000 women of that age.\*
- Abortion rate to women under 20 per 1000 women of that age.
- Proportion of all live births to women aged 15 or under.

Of necessity, secondary data sets were used, which were not created with the aims of this study in mind. They suffer some defects in relation to our aims, namely:

- It has not been possible to calculate birth rates to women under 16 since the baseline population in individual countries has not been available. As a proxy measure of births to very young teenagers, the *proportion* of all teenage births which were to women under the age of 15 has been calculated for each country.
- Abortion rates to all women under 20 have been calculated in the same way, for the years for which data are available. These data include all women under the age of 20 and are not broken down by individual age groups. However, it is quite likely that the majority of abortions among women under 15 occur to women over the age of 12.
- Birth statistics usually refer to the time of registration rather than the time of the birth itself. The assumption has had to be made that this is the case in all countries.
- Although stillbirths and all foetal deaths should be included in the rates, these data are not available for most countries. The numbers among young women are, however, likely to be low.

The approach taken here is as follows:

- *Chapter 1:* Trend data for live birth and abortion rates to teenage women have been compared in all countries for which data were available since 1960.
- *Chapter 2:* Using data from all countries, the relationship between teenage conception and selected variables thought to be associated with outcomes of conception has been examined. Correlation coefficients have been calculated to measure the strength of any associations (Table 1, p. 12).<sup>†</sup> Variables with correlation coefficients of 0.3 or higher were considered strong enough to warrant further investigation.
- *Chapter 3:* Individual countries were selected as of interest on the basis of the first two investigations, and country-specific analyses were carried out and presented as case studies.

\*The number of births and abortions in one year do not represent the number of conceptions in that same year. Because of the gestation period, approximately three-quarters of births in one year, and one-quarter of abortions, will have been conceived in the previous year. The data necessary to calculate accurate conception rates, i.e. by subtracting the gestation period from the date of birth, are not available.

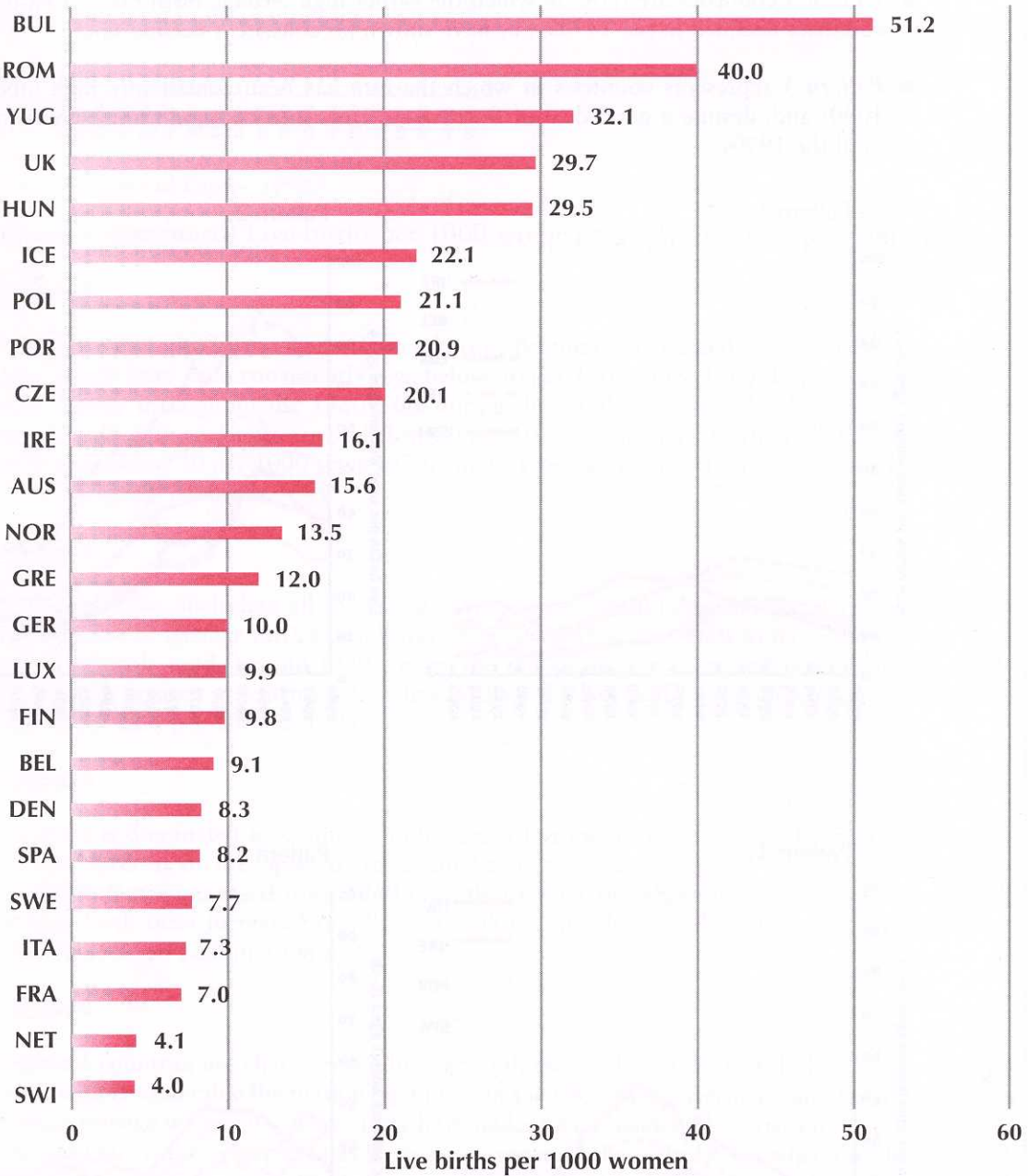
<sup>†</sup>In addition to the correlation coefficients, scatter plots of the relationships were systematically examined to check for non-linearity and possible inconsistencies.



# 1 Cross-country comparisons

## Emergent patterns

Teenage birth rates have been rank ordered for all countries for which data are available (Fig. 1). Differences across Europe are marked. The live birth rate to teenage women varies widely, from 51.2 per 1000 women aged 15–19 in the country with the highest incidence (Bulgaria) to 4.0 per 1000 in the country with the lowest (Switzerland). The UK, with an incidence of 29.7 births per 1000 women aged 15–19, currently ranks fourth among all European countries, but has the highest incidence among countries of Western Europe.



Source: Council of Europe 1997.

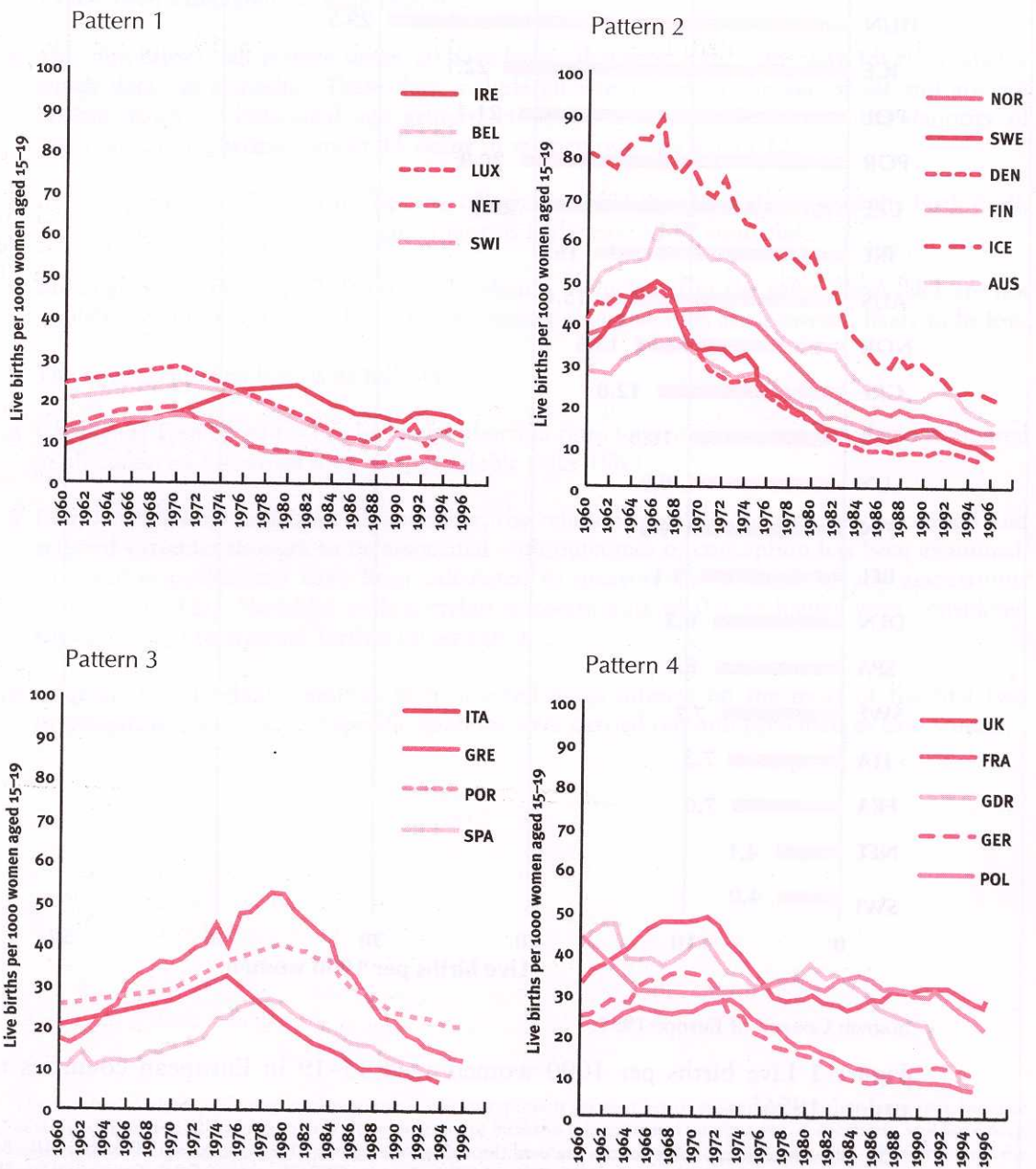
Figure 1 Live births per 1000 women aged 15–19 in European countries ranked by order,\* 1996†

\*The following country abbreviations are used throughout the report: AUS: Austria; BEL: Belgium; BUL: Bulgaria; CZE: Czech Republic; DEN: Denmark; FIN: Finland; FRA: France; GER: Germany; GRE: Greece; HUN: Hungary; ICE: Iceland; IRE: Ireland; ITA: Italy; LUX: Luxembourg; NET: The Netherlands; NOR: Norway; POL: Poland; POR: Portugal; ROM: Romania; SPA: Spain; SWE: Sweden; SWI: Switzerland; UK: United Kingdom; YUG: former Yugoslavia.

†Or latest available year.

Trends in live birth rates to women aged 15–19 from 1960 until the most recently available year have been plotted by countries grouped according to the pattern which emerged (Fig. 2).

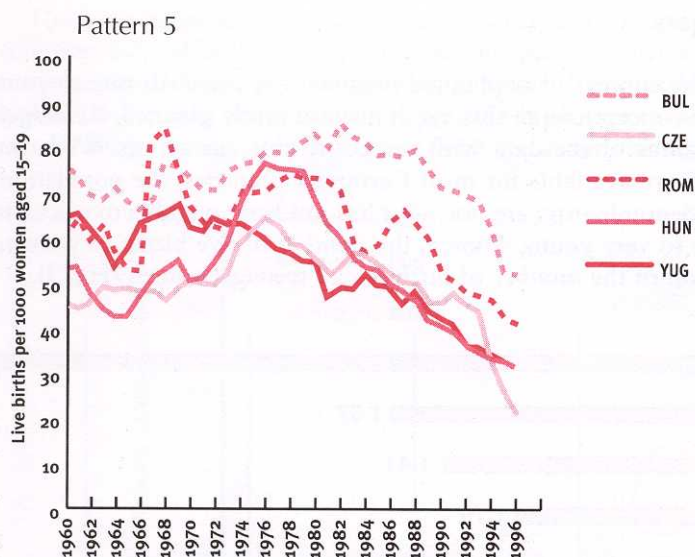
- *Pattern 1* countries are those in which the live birth rate to women aged 15–19 has been consistently below 30 per 1000 since 1960.
- *Pattern 2* countries are those in which rates were higher than 30 per 1000 during the 1960s but which saw a marked decline in the 1970s that has been sustained to the present time.
- *Pattern 3* countries are those in which a change in direction was seen during the late 1970s or early 1980s, from rising to falling incidence.
- *Pattern 4* countries are those in which the earlier high teenage birth rates of Pattern 2 and 3 countries declined in the 1970s, but have shown no consistent decline since.
- *Pattern 5* represents countries in which the rate has been consistently high (above 30 per 1000) and, despite a good deal of fluctuation, have seen no significant increase or decrease until the 1990s.



Source: Council of Europe 1997.

**Figure 2** Live births per 1000 women aged 15–19, Europe, 1960–1996





Source: Council of Europe 1997.

Figure 2 (continued) Live births per 1000 women aged 15-19, Europe, 1960-1996

### Pattern 1

In Switzerland, the Netherlands, Luxembourg, Belgium and Ireland live birth rates to women aged 15-19 have been consistently low, below 30 per 1000, since 1960. In these countries, rates rose slightly throughout the 1960s, fell during the 1970s, and then levelled off in the 1980s. Rates in all these countries are all below 20 per 1000; those in Switzerland and the Netherlands have been below 10 per 1000 since 1975, and in 1996, at 4.0 and 4.1 respectively, are the lowest of all European countries.

### Pattern 2

These countries, including all the Scandinavian countries and Austria, are characterised by an early decline in teenage birth rates. Rates increased during the 1960s to more than 30 per 1000 but fell sharply until the mid-1980s, when the rate of decline decreased. The magnitude of the decline was greatest in Iceland, where live births per 1000 15-19-year-old women fell from 92.6 in 1966 to 22.1 per 1000 in 1996.

### Pattern 3

Pattern 3 is dominated by countries in Southern Europe. In Italy, Greece, Portugal and Spain a marked reversal of the upward trend can be seen to have occurred later than in Pattern 2 countries. Rates increased from 1960 until the late 1970s, when they began to fall. In Greece, teenage birth rates increased rapidly until 1980, and subsequently fell sharply, from 53.1 per 1000 in 1980 to 12.0 in 1996.

### Pattern 4

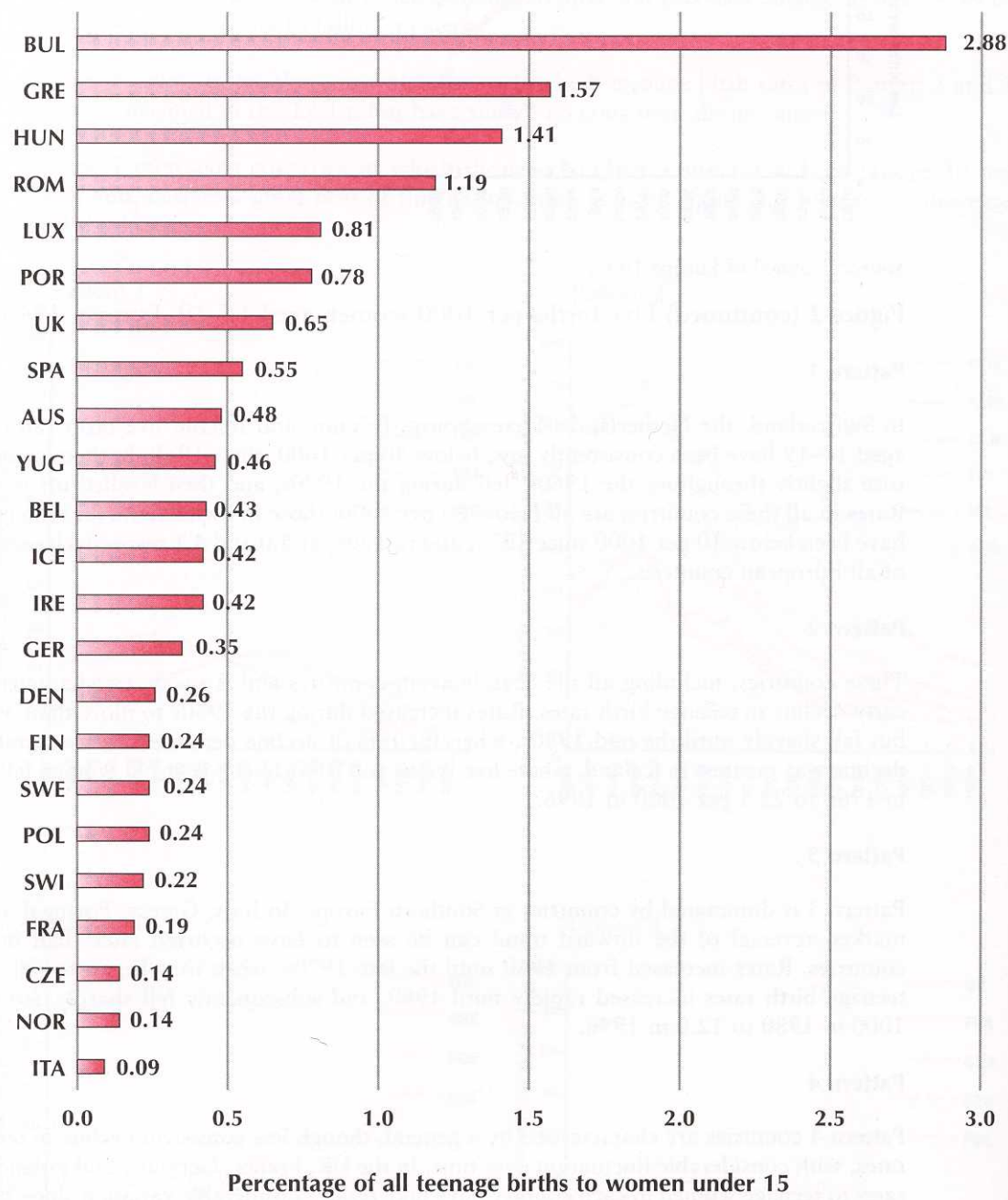
Pattern 4 countries are characterised by a general, though less consistent decline in teenage birth rates, with considerable fluctuation over time. In the UK, France, Germany and Poland, live birth rates to teenage women in each country have undergone considerable variation since 1960. In the UK and France, for example, rates were increasing until the early 1970s, when they began to fall sharply. In the UK, however, the decline was halted in the late 1970s, while in France it continued. Parallels can be seen in both countries in the fluctuations occurring during the 1980s.

### Pattern 5

Pattern 5 countries are typified by high rates of teenage birth, with little sign of decline. Rates remain highest in the countries of Eastern Europe, where they have fluctuated over the past quarter of a century, but have shown no sustained decline or increase. In the early 1980s, rates began to fall in all countries, except Romania, where the rates saw a sudden sharp increase until 1988, after which the rate also began to fall. Today the highest rates are found in Eastern Europe.

# Live births to younger teenagers

Of particular interest in the context of unplanned pregnancy is the birth rate to young women under the age of 15, since conceptions in this age range are rarely planned. Reference has been made above to the limitations of the data with respect to this age group. Whilst numbers of births to women under 15 are available for most European countries, the population estimates which would provide the denominators are not, so it has not been possible to calculate rates. As a proxy measure of births to very young women, the *number* of live births to women under 15 is expressed as a proportion of the *number* of births to all teenage women (Fig. 3).

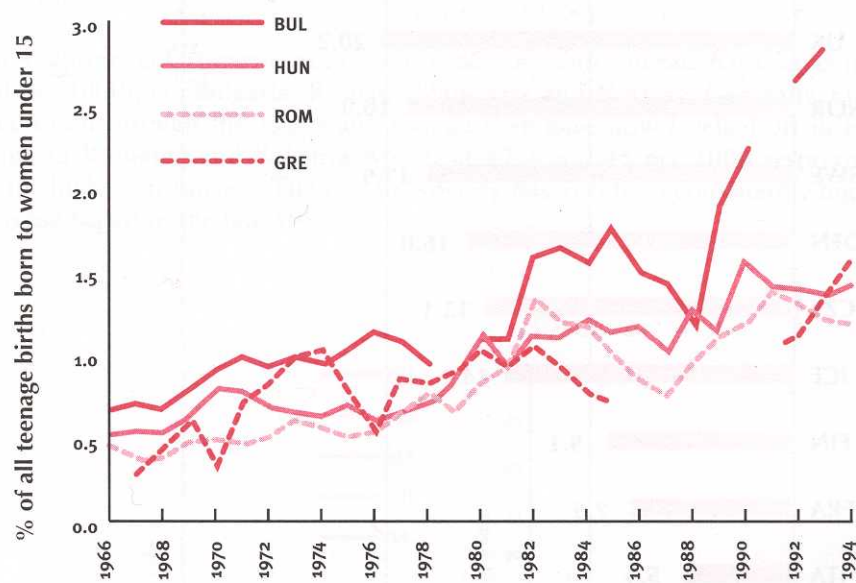


Source: UN 1996.

**Figure 3** Births to women under 15 as a proportion of all births to women aged under 20, 1994 or latest available year



The proportion of all teenage births occurring to women under the age of 15 is low in all countries (<3 per cent) (Fig. 3). In most European countries, births to women under 15 account for fewer than 1 per cent of all teenage births. Even in those countries in which incidence is highest, fewer than 3 per cent of all teenage births are to women under 15 (Fig. 4). As a result teenage births are equated with the 15–19 age group throughout this report.



Source: UN 1996.

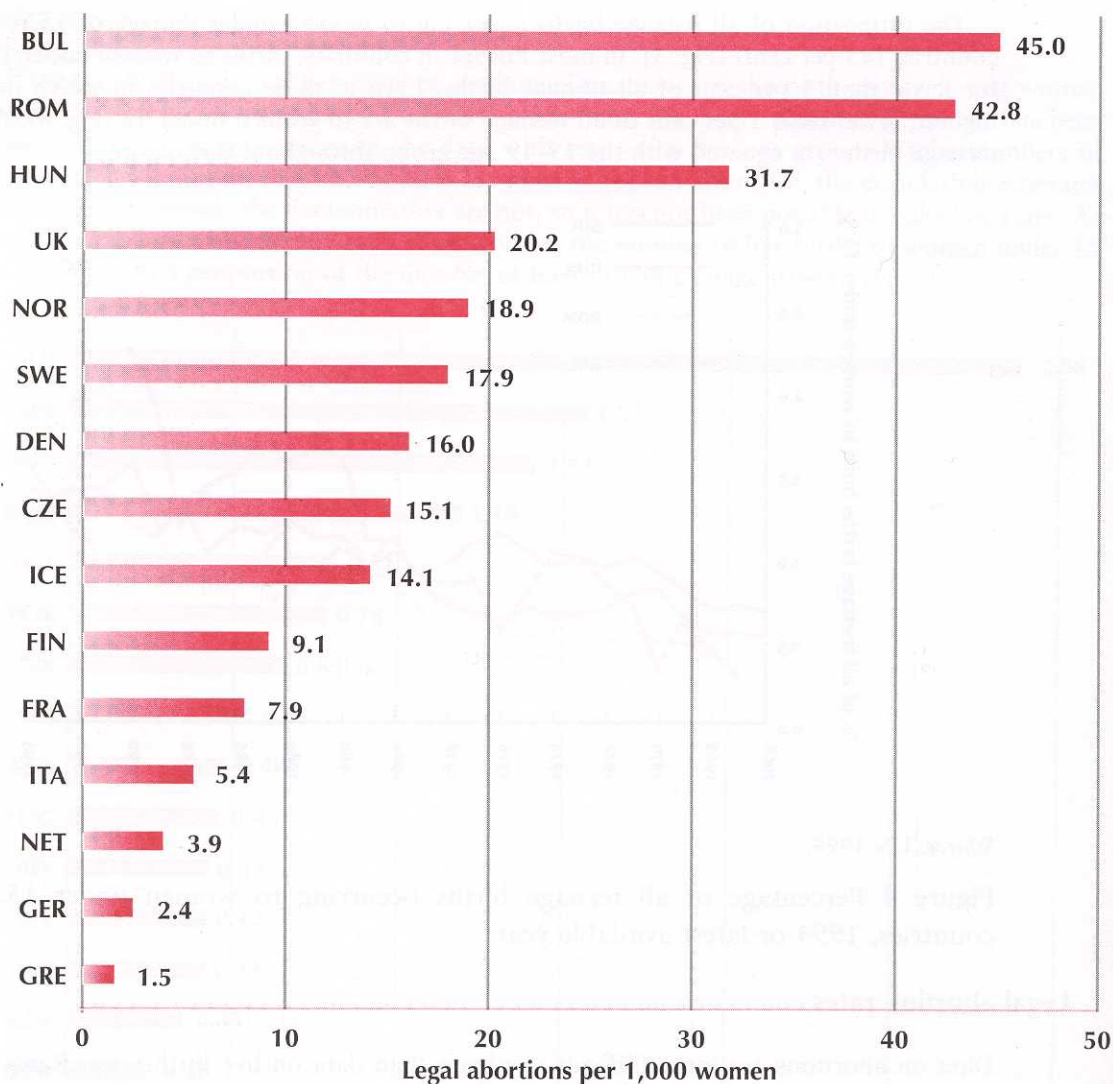
**Figure 4** Percentage of all teenage births occurring to women under 15, selected countries, 1994 or latest available year

### Legal abortion rates

Data on abortions are more difficult to obtain than data on live birth rates. Rates are rarely broken down by age group and are available for only a limited number of countries. The legal status of abortion varies between countries\* and this may affect the reliability of official statistics and the extent to which they are published by official bodies.

\*A description of the current abortion laws in the different European countries is provided on p.25.





Source: UN 1996.

**Figure 5** Legal abortions per 1000 women aged 15–19, 1994 or latest available year

The highest abortion rates are seen in Eastern Europe, particularly in Bulgaria, Romania and Hungary, reflecting greater acceptability of abortion as a fail-safe to contraception in those countries (Sachdev 1998). Ranking fourth, however, in all European countries, and again first among countries of Western Europe, is the UK with a rate of 20.2 legal abortions per 1000 women aged under 20 in 1994.

Trends in abortion rates to women under 20, from 1966 until the most recently available year, are also plotted by country and grouped according to the pattern which emerged (Fig. 6).

Pattern 1 represents countries in which the abortion rate to women under 20 has been consistently below 15 per 1000 since 1966, i.e. France, Germany, the Netherlands, Greece and Italy. Rates in these countries have remained consistently low and have continued to fall steadily since 1980.

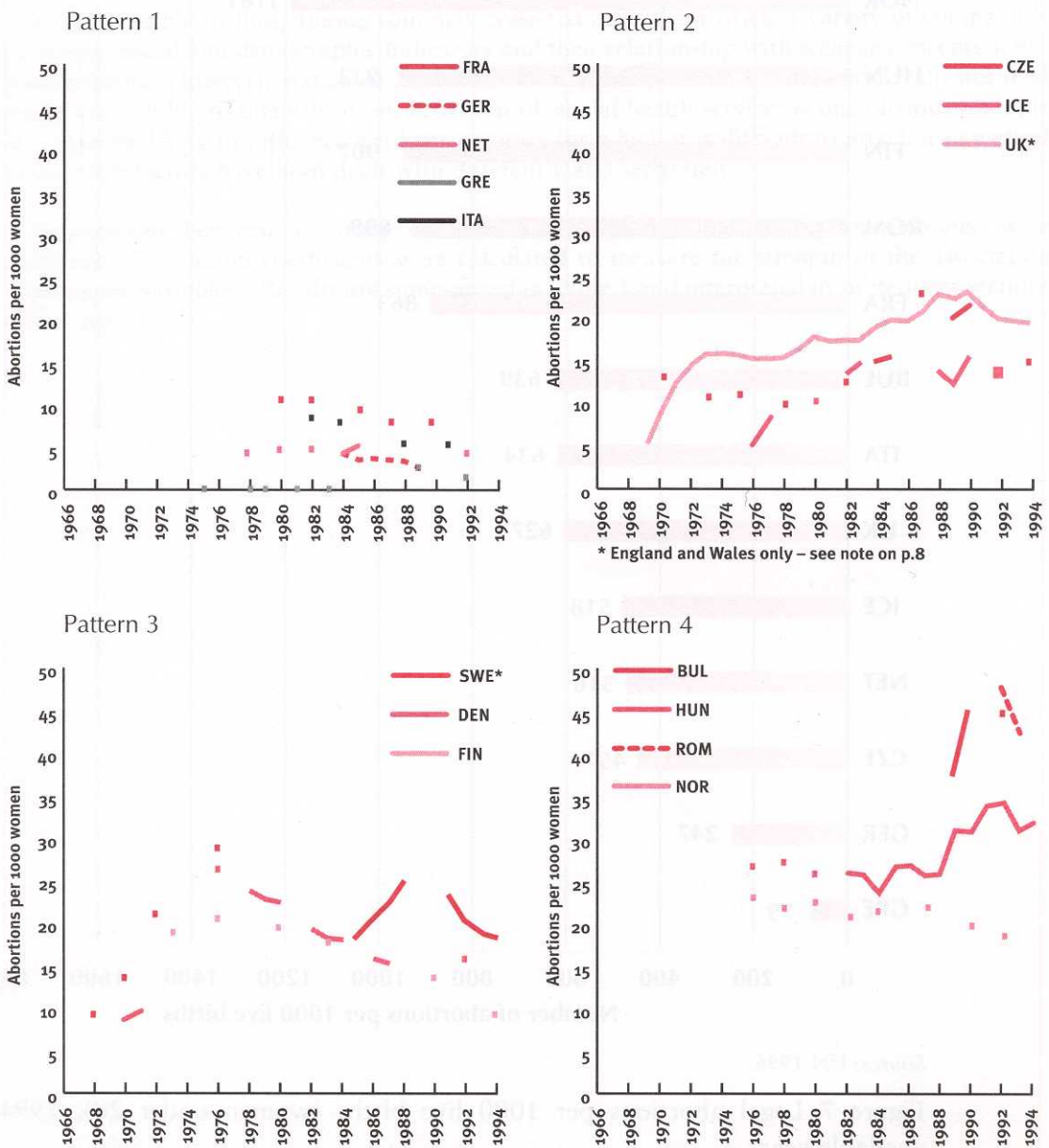
Pattern 2 represents countries in which rates have been increasing since the mid-1970s. The Czech Republic, Iceland and England and Wales<sup>†</sup> fall into this group. Where available, data show that rates have been increasing steadily in all three countries. In Iceland the rate remained stable until the mid-1970s, some ten years after the beginning of the decline in the live birth rate to teenagers. Rates are not only higher in England and Wales than in any other country in Western Europe, but have undergone no significant decline since 1985, despite the decrease in rates in all other countries in Western Europe.

\*Rates in some countries are almost certainly higher than indicated by these available data.

<sup>†</sup>Note that the trend data used here is for England and Wales only and not for the UK as a whole.

Pattern 3 represents European countries in which abortion rates increased during the late 1960s and early 1970s and then saw a change in direction, decreasing during the 1980s or early 1990s.\* In Sweden, Denmark and Finland, abortion rates were lower than 10 per 1000 to women aged under 20 during the late 1960s. After this time rates increased sharply until 1976, when they began to fall again. Generally, abortion rates in Scandinavia are higher than those in Western Europe.

Pattern 4 represents European countries in which the abortion rate has been consistently high (above 20 per 1000), i.e. Bulgaria, Romania, Hungary and Norway. Generally, rates in Eastern Europe increased through the 1980s and though they have now levelled off in Hungary, they remain high in Romania and Bulgaria where, at 42.7 and 45 per 1000 respectively, they are currently the highest in Europe. The rate in Norway has also been consistently high, although a slight decrease began in the late 1980s.



Source: UN 1966–96, ONS 1969–1994.

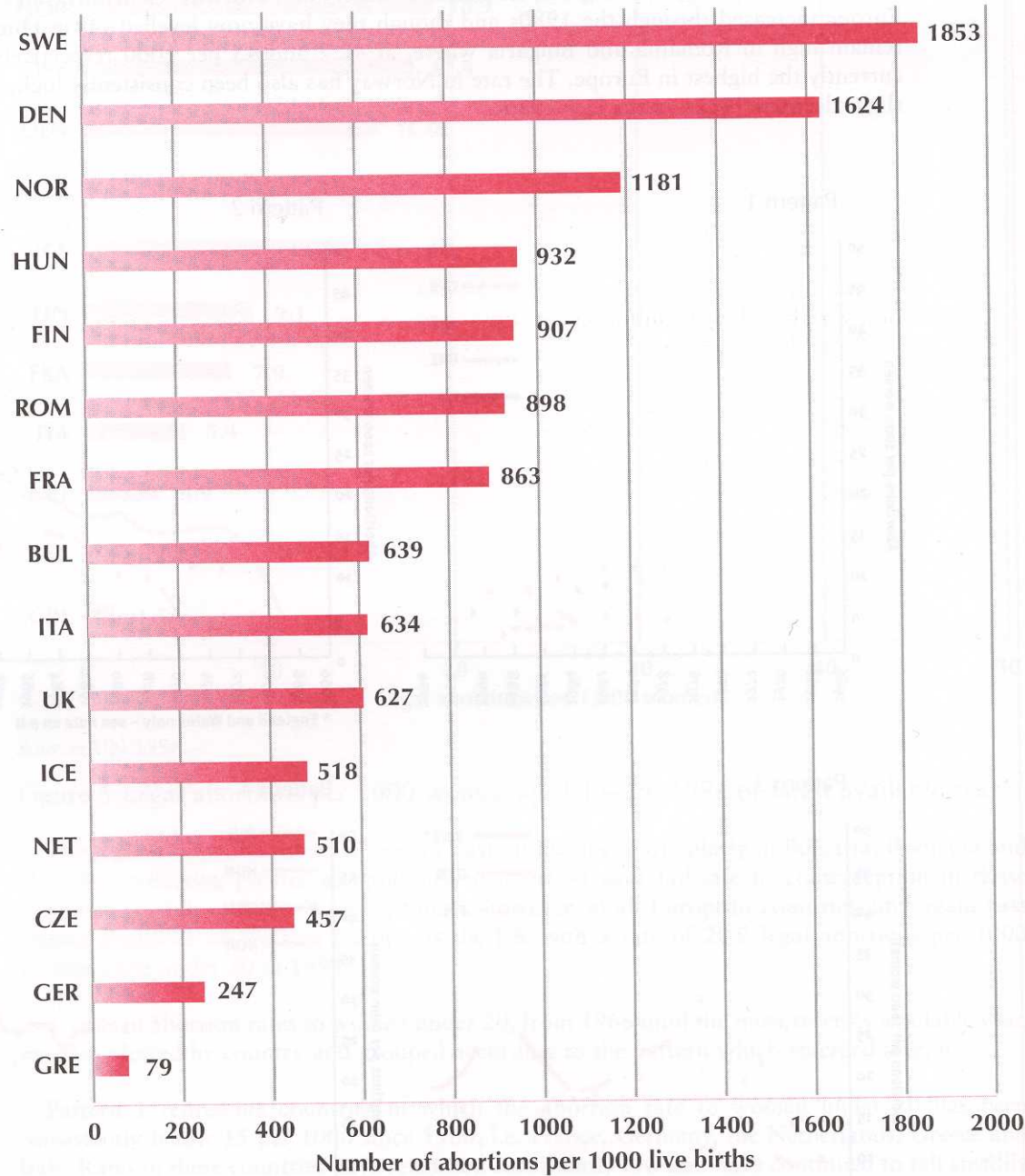
Figure 6 Legal abortions per 1000 women aged 15–19, 1966–1994

\*Sweden represents an anomaly in Pattern 3, with a sharp increase beginning around 1985. Since 1990, however, the rate has been falling steadily.



### Abortion ratio

The abortion ratio, that is, the number of abortions per 1000 live births to under 20-year-olds, provides an alternative measure of conception outcome. In particular it provides an indication of the ratio of terminations to live births. Where the ratio exceeds 1000, abortion is a more common outcome of teenage conception; where it falls below 1000, live births are the more common outcome. A low ratio, for example, may indicate low acceptance of abortion as a means of contraception, or the social acceptance of early childbearing.



Source: UN 1996.

**Figure 7** Legal abortions per 1000 live births (women under 20), 1994 or latest available year

The abortion ratio is generally highest in the Scandinavian countries (Fig. 7), indicating the generally wide acceptance of abortion as a means of birth control among young women. Elsewhere the ratios were below 1000, indicating that the majority of conceptions to women aged under 20 are carried to term.

## 2 Factors associated with teenage conception

The focus of this study is on trends in incidence of teenage conception and on factors which seem to be associated with level or change. Our interest is in those factors which might be amenable to intervention, since the purpose of collecting the data is to guide preventive action. Nevertheless, environmental factors are likely to wield a strong influence on incidence rates, and are therefore likely to have greater potential for explaining both differences between and changes within countries. Demographic variables, such as age at marriage, economic factors, patterns of social expenditure, employment and educational opportunities, provision of housing and other benefits, legislation governing sexual behaviour and religious and social influences, are likely to explain more of the variation between countries than are specific efforts to prevent teenage conception. Some of these factors are more amenable to intervention than others, yet an assessment of the potential impact of such factors on teenage birth and abortion rates is important in the interpretation of trends.

It was possible to find, among routinely collected official statistics, a variety of comparable economic, social and demographic indicators and their relationship with teenage conception has been assessed. However, statistical analysis is clearly not possible for data which do not lend themselves readily to quantification. Provision of sexual health services is one obvious example of a variable likely to influence fertility outcomes for which it is difficult to attach a numerical value. Such factors have been dealt with differently and separately.

Associations between a variety of variables of interest and conception outcome were examined. Correlation coefficients were calculated to measure the strength of the association between the variables.\* Results are summarised in Table 1 and interpreted in subsequent sections of this report.

\*The correlation coefficient measures the closeness of the association between two variables. Values fall between -1.0 and 1.0, -1.0 indicating a perfect inverse relationship, where all the values fall on the line, and 1.0 indicating a perfect direct relationship. The closer the value to -1.0 or 1.0, the stronger the association. A value of zero is given when the variables are not associated. It is important to note that a correlation between two variables shows that they are associated but does not imply a 'cause and effect' relationship.



**Table 1** Correlation coefficients between selected variables and measures of teenage fertility

Variable group	Independent variable	Live births to women aged 15–19 per 1000 women (number of observations)*	Abortions to women under 20 per 1000 women aged 15–19 (number of observations)
Fertility	Total fertility rate <sup>a†</sup>	0.19 (24)	0.22 (15)
	Contraceptive prevalence <sup>b‡</sup>	0.25 (18)	–0.16 (13)
Nuptuality	Mean age of woman at first marriage <sup>c</sup>	–0.66 (24)	–0.58 (15)
	Marriage rate among women aged 15–19 <sup>c</sup>	0.70 (19)	0.55 (13)
Economic variables	GDP per capita US dollars <sup>a</sup>	–0.77 (19)	–0.66 (12)
	UN Human Development Index <sup>a</sup>	–0.62 (23)	–0.59 (15)
Social expenditure	Social protection benefits on health (% of total expenditure) <sup>d</sup>	0.10 (12)	–0.02 (7)
	Expenditure on family benefits (as % of GDP) <sup>d</sup>	0.17 (12)	0.75 (7)
	Social protection benefits on family/maternity (% of total expenditure) <sup>f</sup>	0.28 (12)	0.75 (7)
Income distribution	Share of bottom 20% of households <sup>c</sup>	0.42 (13)	0.45 (8)
	% of population with household expenditure less than half the national average <sup>c</sup>	0.55 (11)	0.04 (7)
Housing	Homelessness rate: estimated homeless per 1000 inhabitants <sup>f</sup>	0.23 (12)	0.15 (7)
Employment	% of women aged 15 or over who are economically active	0.23 (12)	0.71 (7)
	Rates economically active aged 15–19 <sup>d</sup>		
	Total	0.09 (16)	–0.07 (11)
	Men	–0.05 (16)	0.10 (11)
Law	Women	–0.13 (16)	0.03 (11)
	Minimum legal age of heterosexual consent	0.29 (18)	0.12 (10)
	Minimum legal age at marriage <sup>i</sup>		
	Bride	–0.18 (17)	0.02 (10)
	Groom	–0.31 (17)	0.12 (10)
Education	Mean years of schooling <sup>a</sup>	–0.41 (24)	–0.37 (15)
	Adult literacy rate in % of population 15+ <sup>a</sup>	–0.13 (23)	–0.03 (15)
Religion	% of population who are members of a religious community <sup>g</sup>	–0.36 (23)	–0.36 (14)
	% of population who are actively involved in a church <sup>g</sup>	–0.03 (23)	–0.05 (14)
Behavioural/attitudinal	Per capita alcohol consumption (litres p.a.) <sup>f</sup>	–0.41 (12)	–0.20 (7)
	Proportion of women approving of women's right to choose to have an abortion <sup>h</sup>	0.06 (17)	0.73 (10)

Note: Correlations greater than  $\pm 3$  are highlighted in bold, as these may be important.

<sup>a</sup> WHO 1996 or latest available year.

<sup>b</sup> UNICEF 1997.

<sup>c</sup> Council of Europe 1997.

<sup>d</sup> ILO 1996a.

<sup>e</sup> World Bank 1996.

<sup>f</sup> European Commission 1996.

<sup>g</sup> Johnstone 1997.

<sup>h</sup> Reader's Digest 1991.

<sup>i</sup> Adapted from Newman and Koch 1990.

\* i.e. the number of countries for which data were available.

<sup>†</sup> The total fertility rate is defined as the average number of children that would be born alive to a woman during her life-time if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. The rate therefore refers to a synthetic female cohort and is computed by the summation of the age-specific fertility rates.

<sup>‡</sup> Percentage of women in their childbearing years, currently using some form of contraception.

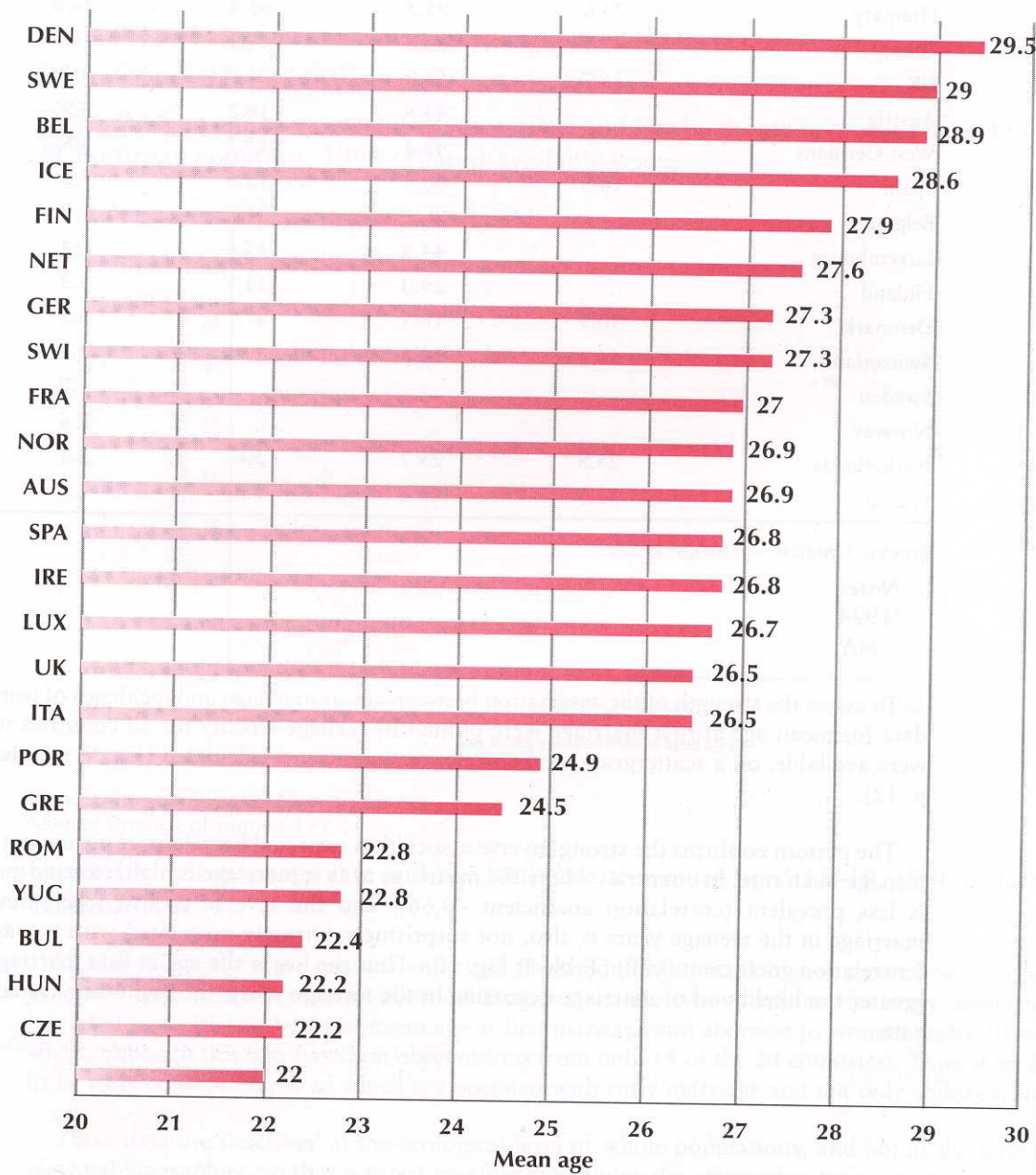


### Marriage patterns

Although age of mother at birth is the variable most commonly taken to assess the extent to which a pregnancy warrants preventive action, it does not, on its own, denote problem status. Marital status is an important additional variable determining the status of an early birth, births occurring within marriage being more likely to have been planned or intended than those occurring outside of marriage. In many societies still, and in our own until fairly recently, early childbirth was not seen as adverse, provided it occurred within marriage. The stigma attached to birth outside of wedlock is diminishing, but there is still a strong societal conviction that early births occurring within marriage (and more recently within cohabitation) are less likely to require intervention than are those to single unsupported teenagers.

Patterns of early marriage are clearly associated with patterns of early childbearing, and the reverse is also true. In many, if not most countries, marriage before birth is still the norm, despite the lessening stigma attached to birth out of wedlock.

The UK now has one of the highest birth rates among unmarried teenagers in the Western world (Alan Guttmacher Institute 1998). Whether this constitutes a public health or social problem may well be a matter of interpretation.



Source: Council of Europe 1997.

Figure 8 Mean age of women at first marriage, Europe, 1996 or latest available year

The age at which women marry for the first time varies markedly across different European countries (Fig. 8), from 22.0 years in Poland to 29.5 years in Denmark.

### First marriage rate

Table 2 charts teenage marriage\* rates at ten-year intervals between 1965 and 1995 (countries are ranked by the 1995 rate).

**Table 2** First marriage rate to women aged 15–19, selected European countries, 1965–1995

Country	First marriages per 1000 women aged 16–19			
	1965	1975	1985	1995
Romania	..	73.6	61.3	42.5
Italy	..	191.7	91.0	39.5 <sup>a</sup>
Former Yugoslavia	75.6	57.3	46.4	35.1
Bulgaria	81.6	85.7	79.6	32.5
Hungary	73.6	95.5	65.8	26.2
Greece	47.3	63.6	44.1	16.5
UK	56.7	54.0	21.9	9.3 <sup>a</sup>
Austria	..	44.6	18.2	8.9 <sup>a</sup>
West Germany	..	48.2	13.2	8.6
Spain	16.9	30.8	18.6	7.2 <sup>a</sup>
Belgium	..	..	21.8	6.9
Luxembourg	..	44.8	15.6	6.4
Finland	..	29.0	11.7	5.3
Denmark	50.9	18.5	4.7	3.2
Switzerland	14.2	10.5	3.9	3.2
Sweden	..	..	..	2.7
Norway	..	..	..	2.6
Netherlands	25.8	25.7	5.6	2.1
France	42.7	40.2	9.6	2.1 <sup>a</sup>

Source: Council of Europe 1997.

Notes:

<sup>a</sup>1994.

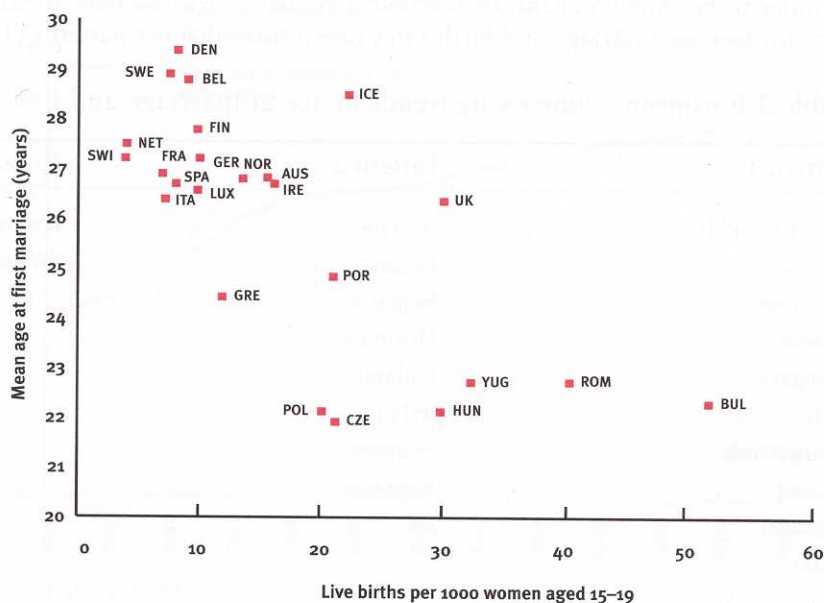
.. NA.

To assess the strength of the association between age at marriage and incidence of teenage birth, data for mean age at first marriage were plotted by teenage fertility for all countries where they were available, on a scattergram, and correlation coefficients calculated (Fig. 9; see also Table 1, p. 12).

The pattern confirms the strong inverse association expected between age at first marriage and teenage birth rate. In countries where the mean age at first marriage is high, teenage motherhood is less prevalent (correlation coefficient  $-0.66$ ), and the reverse is also true. Prevalence of marriage in the teenage years is also, not surprisingly, strongly associated with teenage fertility (correlation coefficient  $0.70$ ) (Table 1; Fig. 10). Thus the lower the age at first marriage, and the greater the likelihood of marriage occurring in the teenage years, the higher the teenage fertility rate.

\*This is the first marriage rate, defined as the total number of first marriages to women aged 15–19 per year, per 1000 women of that age group (Council of Europe 1997).

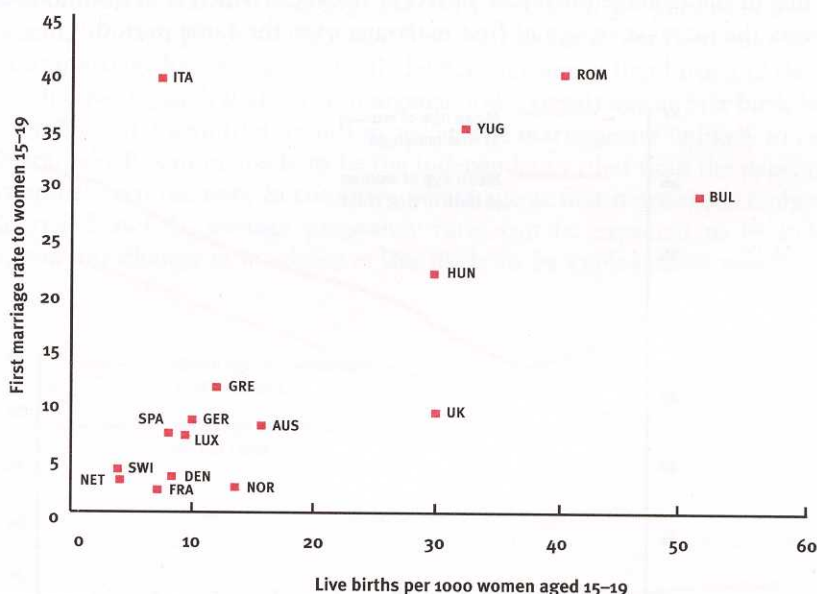




Correlation coefficient  $-0.66$

Source: Council of Europe 1997.

**Figure 9** Mean age of women at first marriage and live birth rate to women aged 15–19, 24 European countries, 1996 or latest available year



Correlation coefficient  $0.70$

Source: Council of Europe 1997.

**Figure 10** First marriage rate and live birth rate to women aged 15–19, 1996 or latest available year

Similar associations are seen for abortion. Those countries with a higher age at first marriage generally have a lower teenage abortion rate, that is, the two events are inversely associated (correlation coefficient between mean age at first marriage and abortion to women under 20 was  $-0.58$ , although this was based on observations from only 15 of the 24 countries). Thus, it seems to be early conception *per se* which is associated with early marriage and not only childbearing.

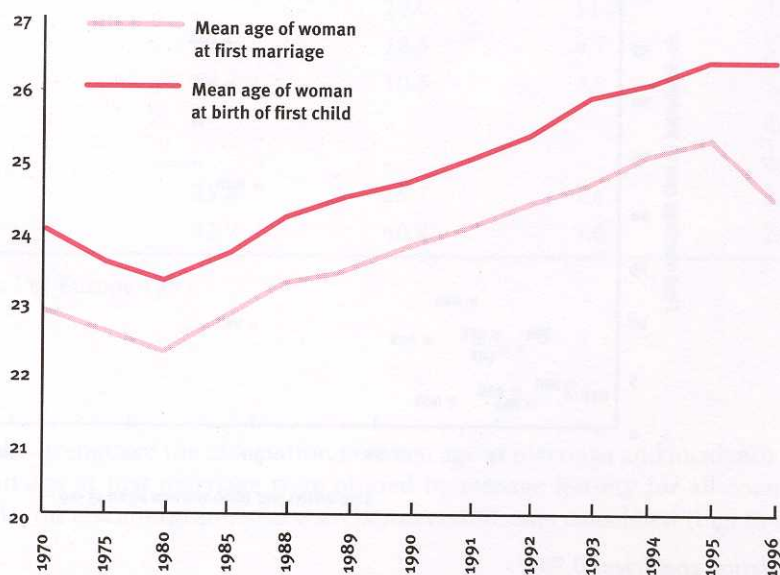
These data are described at the ecological level of whole populations, and not at the level of personal biographies, so that it is not possible to examine the association between marriage and birth within the lives of individuals. In particular it is difficult to ascertain whether women marry

in order to become pregnant, or whether they marry because they are already pregnant. Trend data for teenage marriage and birth rates reveal three distinct patterns (Table 3).

**Table 3** European countries by trends in age at marriage and first birth since 1970

Pattern 1	Pattern 2	Pattern 3
Czech Republic	Austria	Iceland
France	Belgium	Sweden
Germany	Bulgaria	
Greece	Denmark	
Hungary	Finland	
Italy	Ireland	
Netherlands	Norway	
Poland	Romania	
Portugal	UK	
Spain		
Switzerland		

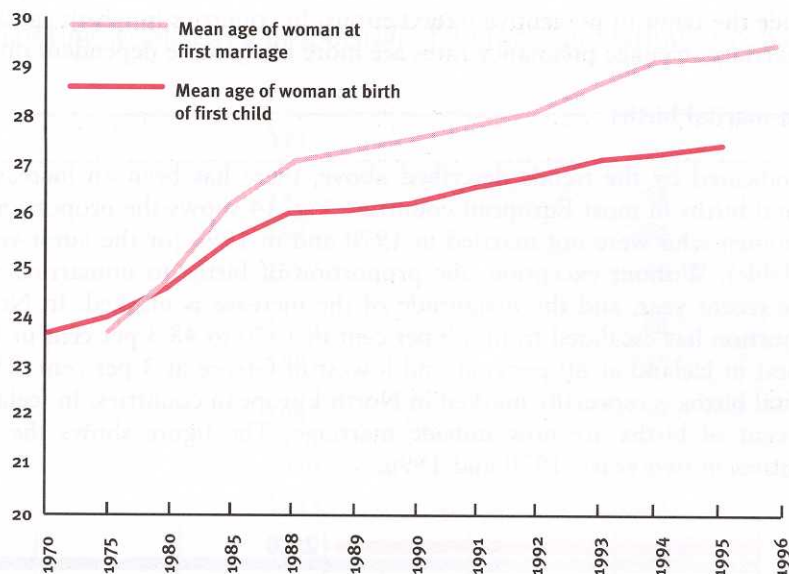
In Pattern 1 countries, age at *first marriage* is consistently below the age at *birth of first child* (Fig.11). This pattern is exemplified by Greece, where the mean age of women at first birth has been consistently higher than mean age at first marriage until recently. The teenage birth rate has also been declining since around 1980 (Council of Europe 1997), which may simply reflect increasing age at marriage rather than the effect of specific interventions. In such countries the decline in the teenage birth rate in recent decades (which is dramatic in Greece) almost certainly reflects the increase in age at first marriage over the same period.



Source: Council of Europe 1997.

**Figure 11** Age at first birth and first marriage, Greece, 1970–1996

Pattern 2 countries have seen a *reversal of trends over time*. Where age at first marriage was once lower than age at first birth, the trend lines for the two events have, more recently, shown signs of convergence or have crossed, such that mean age at first marriage is now higher than mean age at first birth (Fig. 12).

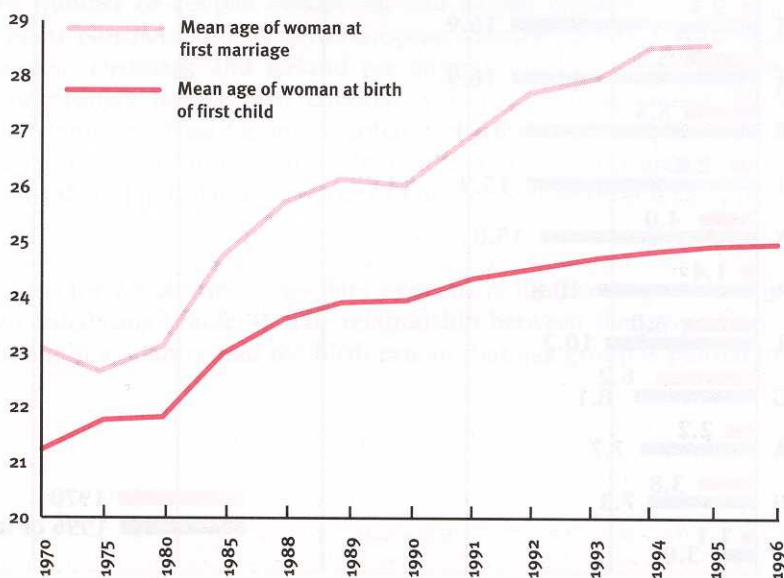


Source: Council of Europe 1997.

**Figure 12** Age at first birth and first marriage, Denmark, 1970–1996

Denmark is of particular interest since the graph lines crossed earlier (around 1977) than elsewhere: 1988 in Norway, 1990 in Belgium and Ireland, 1994 in Austria, Finland and Romania, and even more recently in the UK and Bulgaria.

In Pattern 3 countries, *age at first marriage has been consistently higher than age at first birth* (Fig. 13). In Iceland, for example, both the age at first marriage and first child have been increasing since 1980. Age at marriage has been consistently higher than age at first birth and the gap between the two has been increasing such that age at marriage now exceeds age at first birth by about four years. Again, as in Pattern 2 countries, trends in age at first marriage are unlikely to explain trends in age at first birth, which is more likely to be the independent rather than the dependent variable in the relationship between the two. In countries where age at first marriage is higher than age at first birth (Patterns 2 and 3), teenage pregnancy rates can be expected to be independent of marriage rates, and any change in incidence is less likely to be explained by trends in age at first marriage.



Source: Council of Europe 1997.

**Figure 13** Age at first birth and first marriage, Iceland, 1970–1996

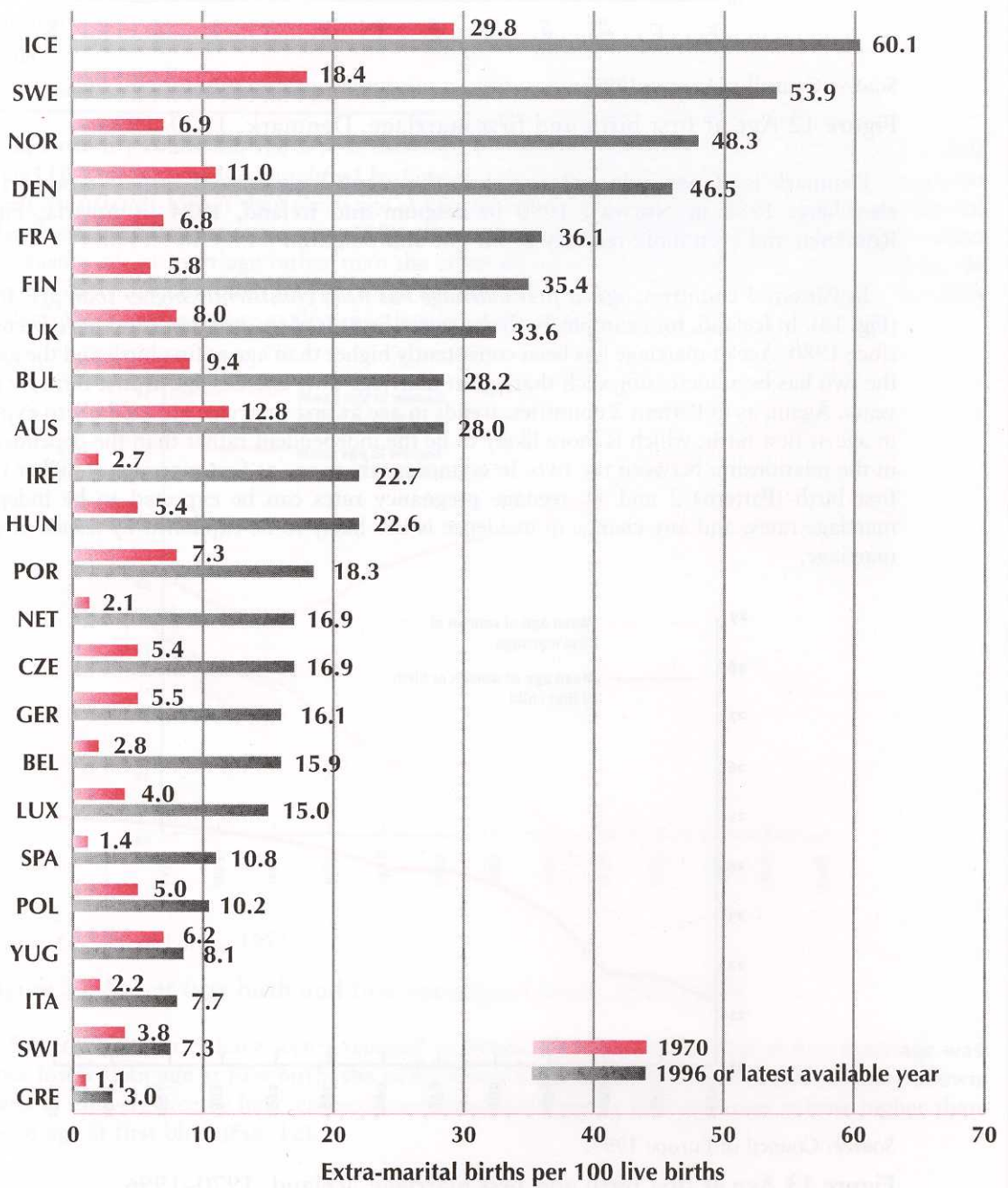
In the context of exploring opportunities for prevention, Pattern 1 countries are perhaps less interesting than Pattern 2 and 3 countries, since trends may well be driven by demographic forces



outside the remit of preventive interventions. In countries in which age at first birth exceeds age at marriage, teenage pregnancy rates are more likely to be dependent on teenage marriage rates.

**Extra-marital births**

As indicated by the trends described above, there has been an increasing incidence of extra-marital births in most European countries. Fig. 14 shows the proportion of all births that were to women who were not married in 1970 and in 1996 (or the latest year for which data were available). Without exception, the proportion of births to unmarried women is higher in the more recent year, and the magnitude of the increase is marked. In Norway, for example, the proportion has escalated from 6.9 per cent in 1970 to 48.3 per cent in 1996. The proportion is highest in Iceland at 60 per cent and lowest in Greece at 3 per cent. The trend towards extra-marital births is especially marked in North European countries. In Iceland and Sweden over 50 per cent of births are now outside marriage. The figure shows the percentages in selected countries in two years, 1970 and 1996.



Source: Council of Europe 1997.

**Figure 14** Extra-marital births per 100 live births, 1970 and 1996

**Table 4** Cohabiting women as a proportion of all those in marital or cohabiting unions, aged 16–19

Country	Year	%
Sweden	1975	88
	1985	93
	1989	90
Denmark	1976	84
	1985	88
Norway	1987	83
Finland	1980	67
	1985	75
France	1975	36
	1985	69
Great Britain	1980	13
	1986	42
	1989	62
Netherlands	1986	59
Austria	1981	31
	1989	45
West Germany	1978 <sup>a</sup>	20
	1988 <sup>a</sup>	45
Switzerland	1980	38

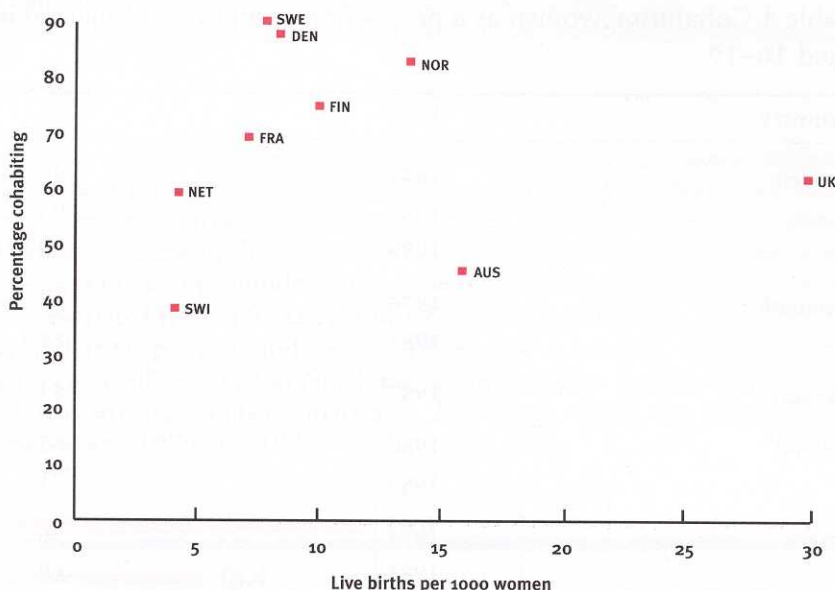
Source: Adapted from Kiernan & Eстаugh 1993, Table 9.1.

<sup>a</sup> Age group 18–25 – estimates.

The incidence of births out of wedlock reflects changes in patterns of cohabitation and marriage. The number of couples cohabiting and having children outside marriage has been increasing in many Northern and Western European countries in recent years (Kiernan & Eстаugh 1993). In Sweden, Denmark and Iceland pre-marital cohabitation is virtually the norm and women are increasingly having their children within cohabiting unions. In Austria, Finland, Norway, Switzerland and West Germany, cohabitation has increased since the 1970s, though it still tends to be primarily a childless phase. In Southern European countries, such as Greece, Italy, Spain and Portugal, and in Ireland and Eastern Europe, cohabitation is rarer (Kiernan & Eстаugh 1993).

In all countries for which time series data exist, there has been an increase in the numbers of young women cohabiting (Table 4). The relationship between the proportions of women aged 15–19 cohabiting in a country and the birth rate in that age group is plotted in Fig. 15.





Correlation coefficient 0.04

Source: Cohabitation rates: Kiernan & Estaugh 1993; live birth rates: Council of Europe 1997.

**Figure 15** Percentage of all women in cohabiting unions and live births per 1000 women aged 15–19, latest available year

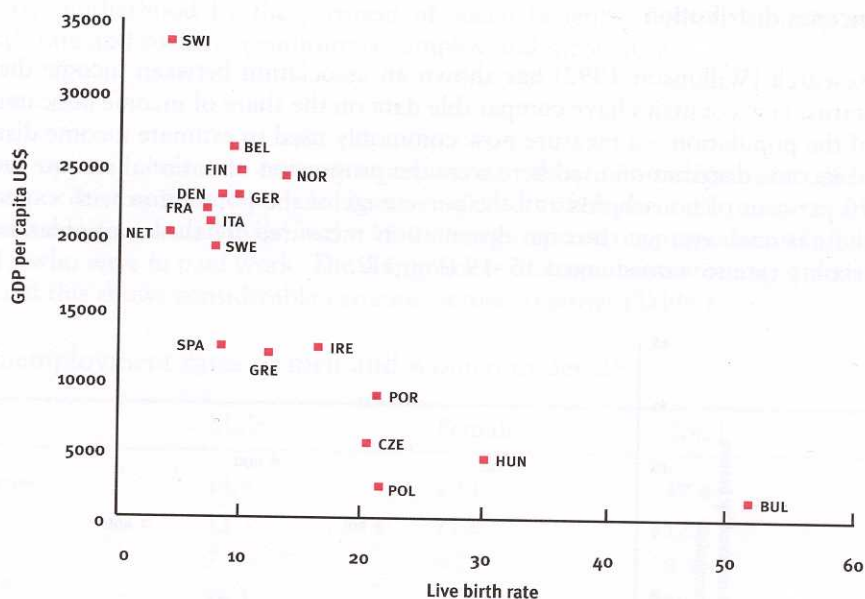
If Austria and the UK are seen as outliers on this graph, then a better fit would be seen between the remaining countries, such that the higher the cohabitation rate in a particular country, the higher the teenage birth rate. This indicates an association between the cohabitation rate among young people and the teenage birth rate, suggesting that teenage births may be taking place generally within cohabiting unions. In the UK, a marked outlier, and to a lesser extent Austria, the teenage birth rate is relatively high, yet the proportion of young people cohabiting is comparatively low.

One interpretation of this is that a higher proportion of teenage births in the UK are to single unsupported women. However, in England and Wales, between 1981 and 1991, the rate of births outside marriage to women under 20 increased from 13.7 to 28 per 1000 women aged 15–19, but the number of solely registered births (registered by the mother alone) increased only slightly (Babb 1993).

## Economic variables

Poverty has been associated with early motherhood, as a result of a lack of realisable personal goals relating to material well-being, and also through an absence of appropriate services in poorer countries (Smith 1993). Thus, absolute measures of wealth in a country, as well as disparities between rich and poor, were both expected to be associated with teenage fertility. Two indicators of absolute national wealth were used, Gross Domestic Product (GDP) and the United Nations Human Development Index (UNHDI).<sup>\*</sup> Both showed strong inverse relations with teenage motherhood (Table 1) (correlation co-efficients –0.66 and –0.62 respectively).

<sup>\*</sup>The UNDP Human Development Index (HDI) has been part of the annual Human Development Report since 1990, incorporating national indicators of health, education and income. Adult literacy has been used since 1990 as an indicator of education, with mean years of schooling added in 1991, and average life expectancy is used as an indicator of health conditions. Average per capita income is measured in terms of purchasing power parity units to reflect price variations.



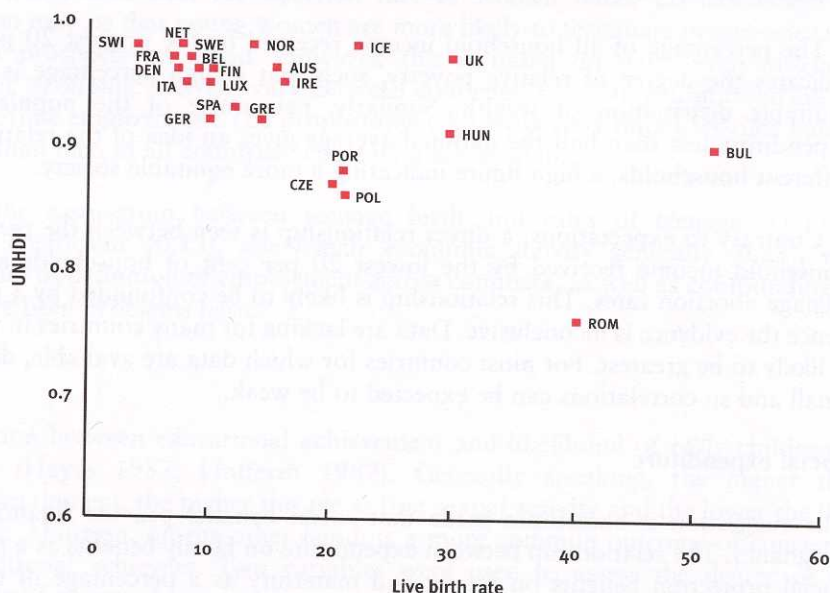
Correlation co-efficient  $-0.77$

Source: WHO 1996; Council of Europe 1997.

**Figure 16** Economic development (GDP) and live births per 1000 women aged 15–19, 1996 or latest available year

Plotted by country, national wealth and teenage fertility rates were seen to be inversely associated. The teenage abortion rate was similarly negatively correlated with economic indicators (Table 1). Birth and abortion rates to women under 20 thus appear to decrease with increasing economic growth.

In terms of intervention, these data suggest the additional need for a health promotion focus on secondary prevention, that is, mitigating the adverse outcome of early motherhood for the young women involved, since problems are likely to be exacerbated by material deprivation.



Correlation coefficient  $-0.62$

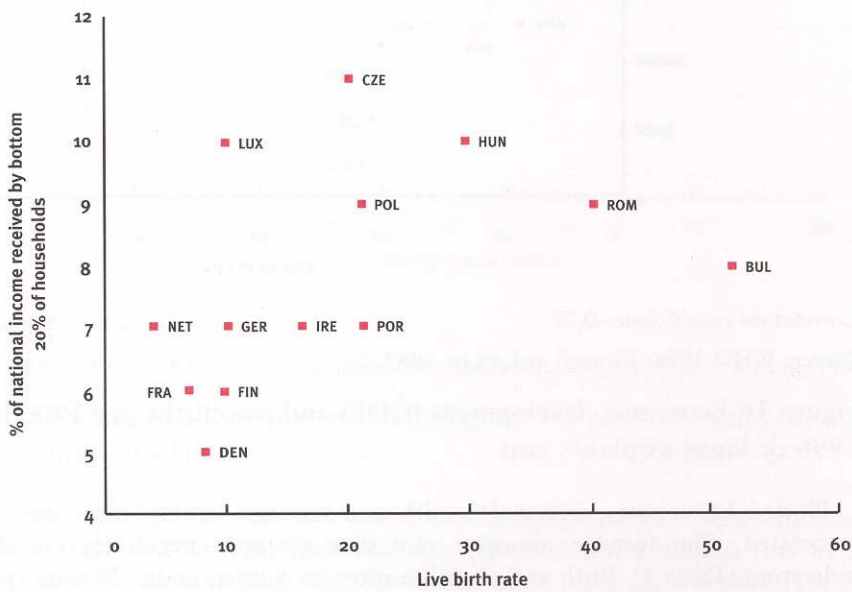
Source: WHO 1996; Council of Europe 1997.

**Figure 17** Economic development (UNHDI) and live births per 1000 women aged 15–19, 1996 or latest available year



Income distribution

Research (Wilkinson 1992) has shown an association between income distribution and health status. Few countries have comparable data on the share of income allocated to successive tenths of the population – a measure now commonly used to estimate income distribution.\* Indicators of income distribution used here were the proportion of national income received by the bottom 20 per cent of households and the percentage of the population with expenditure less than half the national average. Income distribution measured by these variables is correlated with the fertility rate to women aged 15–19 (Fig. 18).



Correlation coefficient 0.42

Source: UNICEF 1997.

**Figure 18** Income distribution and the live birth rate per 1000 women aged 15–19, 1996 or latest available year

The percentage of all household income received by the poorest 20 per cent of households indicates the degree of relative poverty, such that a high percentage is indicative of a more equitable distribution of wealth. Similarly, percentage of the population with household expenditure less than half the national average gives an idea of the relative spending power of different households, a high figure indicating a more equitable society.

Contrary to expectations, a direct relationship is seen between the percentage of the annual household income received by the lowest 20 per cent of households and teenage birth and teenage abortion rates. This relationship is likely to be confounded by a number of factors and hence the evidence is inconclusive. Data are lacking for many countries in which income inequity is likely to be greatest. For most countries for which data are available, disparities are relatively small and so correlations can be expected to be weak.

Social expenditure

The suggestion is sometimes made that social benefits provide financial incentives to early pregnancy. The relationship between expenditure on family benefits as a percentage of GDP and social protection benefits on family and maternity as a percentage of total expenditure were selected as measures of family benefits and their relationship with teenage motherhood examined. Social protection benefits as a proportion of total expenditure was more strongly correlated with the teenage live birth rate than was proportion of GDP allocated to family benefits (correlation coefficients 0.28 compared with 0.17), but the association was not strong in either case. There is thus little evidence in the European data that young women are motivated

\*This variable was only available for 13 of the 24 countries.

to enter early motherhood by the prospect of social benefits. The relationship between the teenage birth rate and social expenditure is complex and inconclusive.

## Employment

Employment opportunities for teenagers impact on their life choices and therefore have consequences for fertility rates. Data used here as indicators of employment prospects are economic activity rates (total, female and male) in the 15–19 age group and the proportion of all women over the age of 15 who were in paid work. The employment situation for women aged under 25 is also examined, and this shows considerable variation across countries (Table 5).

**Table 5** Unemployment rates to men and women under 25

	Male	Female	Total
All 12 countries	14.9	20.1	17.4
Belgium	12.7	21.8	17.0
Denmark	7.9	9.2	8.5
France	16.1	24.1	20.1
Germany	4.5	5.9	5.1
Greece	17.2	36.2	32.1
Iceland	26.3	28.8	23.6
Ireland	24.9	21.9	23.6
Luxembourg	3.6	3.9	3.7
Netherlands	12.9	14.5	13.7
Portugal	8.5	15.4	11.6
Spain	27.0	42.1	33.8
United Kingdom	11.2	8.3	9.9

Source: Eurostat 1991.

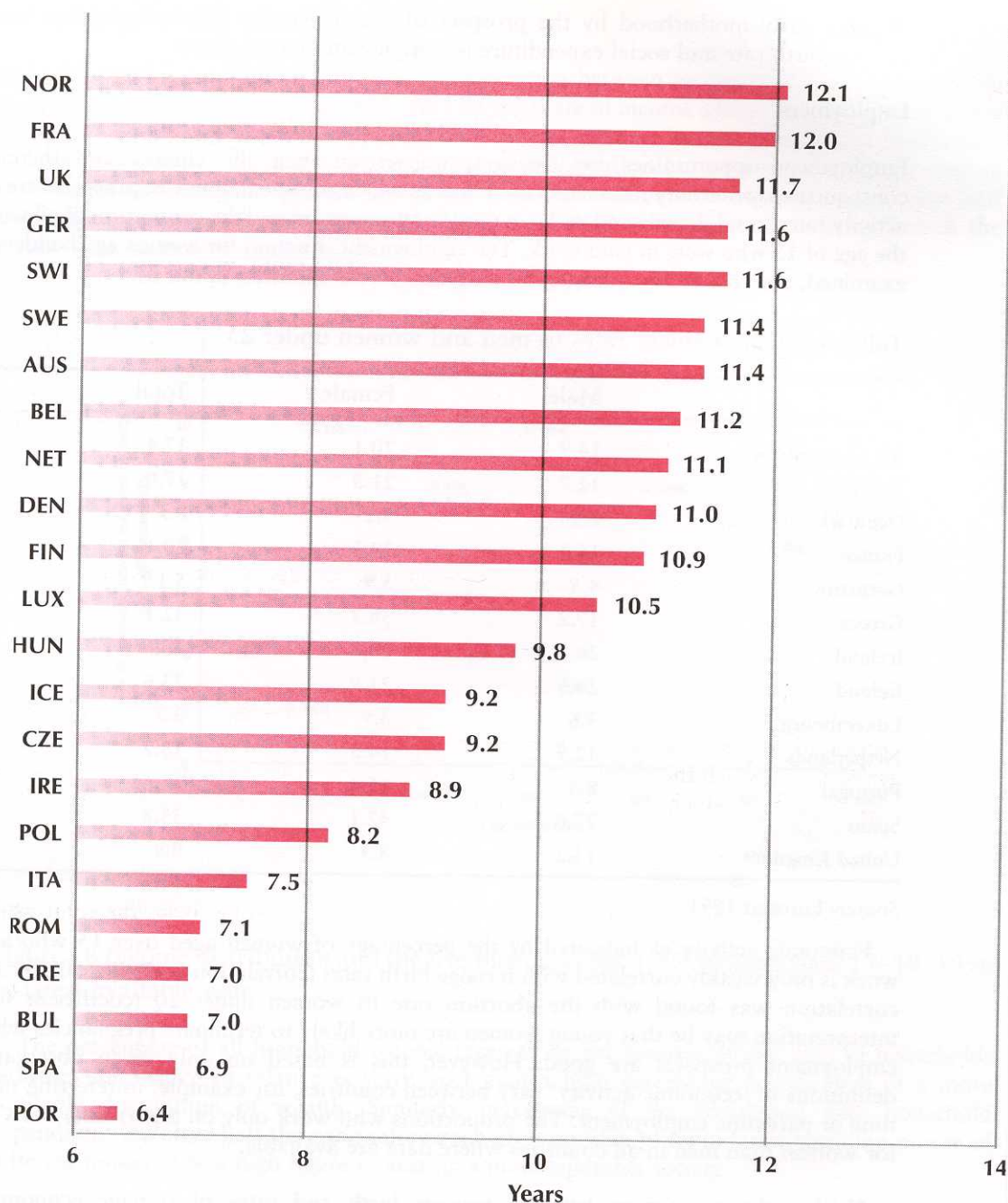
Economic activity as indicated by the percentage of women aged over 15 who are in paid work is only weakly correlated with teenage birth rates (correlation coefficient 0.23). A stronger correlation was found with the abortion rate to women under 20 (coefficient 0.71). One interpretation may be that young women are more likely to terminate pregnancies where future employment prospects are good. However, this is based on only seven observations, and definitions of 'economic activity' vary between countries, for example, in referring only to full-time or part-time employment. The proportions who work only on a part-time basis are higher for women than men in all countries where data are available.

Neither the association between teenage birth and rates of teenage economic activity (correlation coefficient  $-0.13$ ), nor female economic activity generally (0.23), were strong. Inconsistencies of definition of employment across countries, as well as confounding factors, are likely to have been problems here.

## Education

The association between educational achievement and likelihood of early childbearing is well documented (Hayes 1987; Hofferth 1987). Generally speaking, the higher the level of educational attainment, the higher the age at first sexual activity and the lower the likelihood of teenage birth. Abortion, on the other hand, is a more common outcome of conception among higher educational achievers. Two variables were used to assess the degree of educational attainment, level of attendance (mean years of schooling) and achievement (adult literacy rate). Variations between countries in average length of school attendance are illustrated in Fig. 19.





Source: WHO 1996.

**Figure 19** Mean years of schooling, selected European countries, 1996 or latest available year

Generally, less time is spent in full-time education in Southern and Eastern Europe than in North Western Europe. Mean years of schooling was inversely associated with both the live birth rate (coefficient  $-0.41$ ) and the abortion rate to women under 20 (coefficient  $-0.37$ ), indicating that both birth and abortion rates decrease with increasing levels of education. It is possible that a circular relationship exists here, as years of schooling is both a determinant of, and determined by, the teenage fertility rate.

There was no evidence of an association between adult literacy rates and teenage fertility. In 11 out of the 23 countries for which data exist, literacy rates were 100 per cent. Portugal (71.0 per cent) and Greece (84.4 per cent) had the lowest rates; in all other countries rates were above 90.0 per cent. Given these high rates and the extent to which the relationship between literacy and teenage fertility is likely to be confounded by a number of factors, the lack of correlation is perhaps not surprising.



## Legal issues

Legislation governing sexual behaviour, abortion and contraceptive provision to young people can all be expected to impact on live birth rates among teenagers. Here, laws relating to the age of heterosexual consent and marriage, and to provision of abortion and contraception for young people in all European countries, are looked at. In the country case studies (Chapter 3) the effects of legislation are examined in greater depth.

### Legislation governing age of sexual consent

The legal age of consent for heterosexual intercourse varies between different European countries (Appendix 6). The correlation between minimum legal age of sexual consent and teenage conception was positive, though weak (coefficient 0.29 based on 18 observations), that is, the teenage birth rate increased with increasing age of consent. This makes little intuitive sense and one can only conjecture that the relationship may be confounded by a tendency towards traditionalism, that is, countries which have stricter laws relating to minimum age at first intercourse being those in which early birth and marriage are still acceptable. Little evidence was found of any correlation between legal age of sexual consent and the legal abortion rate to women under 20 (correlation coefficient 0.12). There is thus no evidence here that the legal age of sexual consent is related to high rates of teenage conceptions or abortion.

### Legal age of marriage

There was little evidence, either, of a relationship between the legal age of marriage and teenage conception. The only association was between the minimum legal age of the groom and the live birth rate to women aged 15–19 (correlation coefficient –0.31). More important in this context is the age at which the majority of people actually marry, since this is obviously later on average than the age at which they are permitted to do so, and this has been dealt with above (p. 14).

### Legislation governing abortion

The law relating to abortion varies widely throughout Europe, from the total prohibition of abortion, as in Ireland, to the explicit right to choose, as in Sweden (Ketting 1989). The effect of legislation on abortion practice is not clear (Ketting 1990). The timing of legislative change certainly seems to impact on subsequent abortion rates. In the UK, Denmark, Austria, France and Italy, where abortion decriminalisation preceded widespread availability, abortion rates were initially high but subsequently declined. In Sweden, Germany and Spain, contraceptive provision coincided with liberalisation of abortion law so that the effects of each were not discernible. In the Netherlands and Belgium, widely available contraceptive services were accessible before abortion became legal, and as a result the abortion rate remained comparatively low (Ketting 1990).

The effect of legislation on incidence of abortion is attenuated by the proximity of all European countries to neighbouring countries in which abortion is available. Abortion tourism is widespread with, for example, Irish women seeking abortions in England, such that the overall effect of legislation on birth rates is now probably minimal. Perhaps more important than the specific laws governing abortion is the manner in which legislation is enforced. In some countries, although laws may be liberal, little has been done to reinforce them. In Austria, for example, few abortion services exist outside Vienna and consequently many women find access difficult (Ketting 1989). In Sweden and Denmark, by contrast, the approach is not merely permissive but pro-active; governments ensure that there are sufficient abortion facilities in every region and that the cost of the operation is covered by the national health insurance (Ketting 1989). The cost of abortion also varies widely across Europe, as does the means of payment. Access to abortion varies with professional attitudes and public opinion (David 1992).



Table 6 Abortion in Europe, term model and indications model

Term model (up to 12 weeks unless specified)	Indications model		Illegal
	Broad	Narrow	
Austria	Britain	Poland	Ireland
Belgium	Finland	Portugal	
Bulgaria	France	Spain	
Czech Republic	Hungary		
Denmark	Switzerland		
Germany			
Netherlands			
Norway			
Sweden <sup>a</sup>			

Source: Adapted from Rolston & Eggert 1994, Table 1, p. xxi.

<sup>a</sup>up to 18 weeks.

Abortion rates to women under 20 are examined against a backdrop of current abortion laws in different European countries, using the categorisation created by Rolston and Eggert (1994) (Table 6). Countries were classified on the grounds of whether abortion is legal or not, and, if legal, whether allowed on the basis of an *indications* or a *term* model. The *term model* allows abortion on request up to a specified time limit. In the *indications model*, abortion is allowed on the basis of a number of conditions – medical, physical and social. A summary table of the current situation in many European countries is included as Appendix 4.

Religion

The relationship between religion and the incidence of teenage pregnancy has been documented elsewhere (Jones *et al.* 1986). Religion can be seen as a potential influence on sexual behaviour, contraceptive use and outcome of conception and so may have potential value in explaining variations in teenage fertility rates in different European countries. Its influence may be felt at the societal level, on provision of services, or at the individual level, in terms of personal values and lifestyles.

This report draws on data from a recent publication (Johnstone 1997) which has brought together Church membership figures for every country in Europe annually from 1960. Two indicators were used to measure religious affiliation:

- *Community* refers to those who belong to a religious denomination, however loosely. This figure approximates the percentage of people baptised in that country. Inevitably this figure includes those who are nominal or notional about their religion.
- *Membership* refers to those who take some active step to belong to a church. What this step may be varies from one denomination to another but it is likely to be a more meaningful indication of the proportion of the population who practise a religion which might have an influential impact on other behaviours.

There was considerable variation in both measures between European countries. The proportion of the population who were religious according to the measure *community* ranged from 39% in Bulgaria to 98% in Ireland. Religiosity measured by *membership* ranged from 9% in France to 79% in Ireland. The UK had values of 64% and 11% respectively.

When correlated against the measures of teenage fertility, a weak inverse association was found between religious denomination, and the live birth rate (correlation coefficients of -0.36). However, no association was found between the teenage birth rate and active church membership.

The relationship between religiosity and the teenage birth rate is complicated. Associations can work through a number of pathways. For example, religion may influence attitudes towards sex outside of marriage. Alternatively, it may influence attitudes to contraception such that young people are sexually active without using contraception. In this case a positive correlation might be expected. Thirdly, religious affiliation may influence attitudes towards abortion such that those with strong religious beliefs might be more likely to deal with a conception by terminating it.

These relationships are likely to be confounded by a number of other factors. Once again, these data allow analysis and identification of associations only at the population level, and so conclusions cannot be reached about the likely impact of religious beliefs on behaviour in individual women. What can be concluded is that the influence of religion is no longer strong enough to be observable at this level. Nevertheless, it seemed likely that a country in which religion had, until recently, wielded a strong influence on all aspects of lifestyle, would provide an interesting focus. This has been the situation in France where community has fallen from 98 per cent in 1960 to 79 per cent in 1995 and membership from 30 per cent to 9 per cent (Johnstone 1997). For this reason France was selected for inclusion as a case study in this report (Chapter 3).





### 3 The case studies

Seven countries were selected as case studies, on the basis of features of interest which emerged from cross-national comparisons. At least one country was selected from each of the five patterns described in Chapter 1. The aim was to look not only at countries with consistently low rates but also at those which have seen significant declines or changes in the incidence of teenage pregnancy.

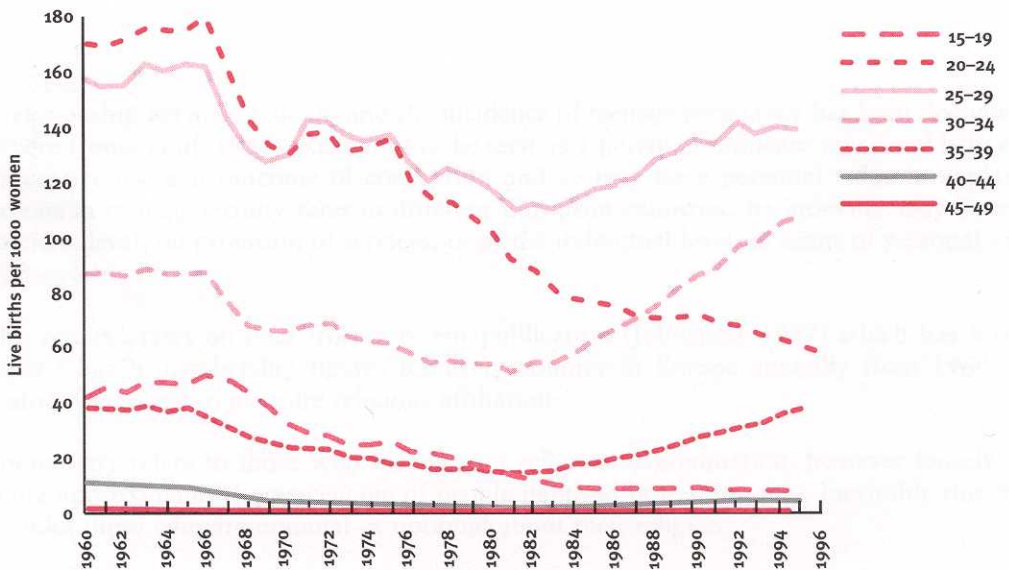
Countries have also been chosen to represent a variety of socio-economic situations: Denmark, France, Hungary, the Netherlands, Portugal, Switzerland and the UK, where the GNP ranges from a high of \$40,630 in Switzerland to a low of \$4,347 in Hungary.

A major focus of this report is the extent to which features amenable to policy change can impact on unwanted conception rates to teenagers. In each case study, therefore, features are examined which are likely to influence both sexual activity of adolescents and its outcomes.

#### Denmark

The live birth rate to Danish women aged 15–19 has undergone a dramatic decline in recent decades, from 49.6 births per 1000 women in 1966 to 8.3 per 1000 in 1995. Denmark currently ranks seventh lowest in Europe. Until 1966 the birth rate amongst women aged 15–19 was increasing, and the dramatic fall in the live birth rate to younger women occurring in the late 1960s seemed worthy of investigation.

Fig. 20 below illustrates the declining fertility rate to teenagers, compared with fertility trends in all age groups.



Source: Council of Europe 1997.

**Figure 20** Live birth rate by five-year age groups, Denmark, 1960–1996

The decline in the live birth rate to women of all ages, beginning around 1966, was most marked in the 20–24 age group where it fell from 170.7 per 1000 women in 1966 to 130.4 per 1000 in 1970 and then continued to decline, although more gradually, to 61.0 per 1000 in 1995.

The early 1980s saw a reversal of the downward trend in older age groups of women, so that in women aged 25 and over the live birth rates began to increase again. This was most marked in the 30–34 year age group, where it rose from 59.2 per 1000 women in 1984 to 108.5 per 1000 in 1995.

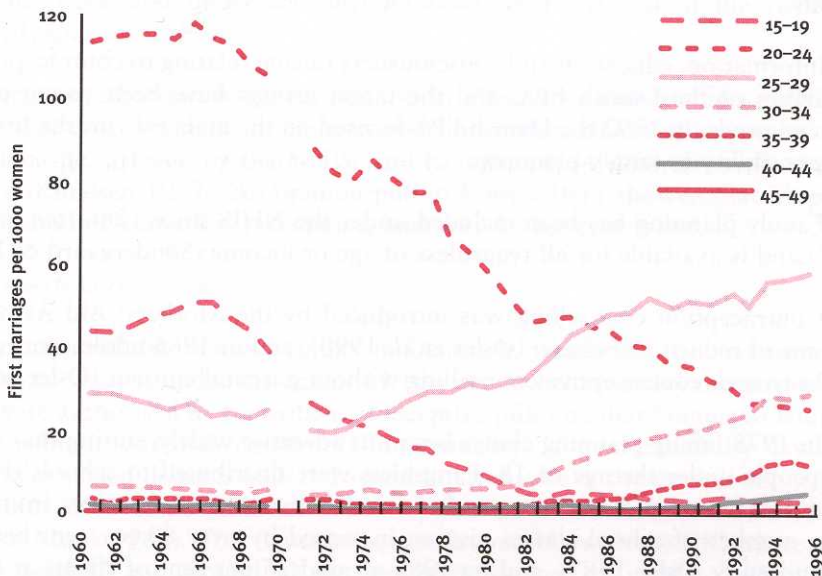
The increase in the live birth rate to women over 24, accompanied by a simultaneous decline amongst younger women, may simply reflect an upward shift in the age at which women began their families. The total fertility rate fell from 2.54 in 1960 to 1.81 in 1995.

**Marriage rates**

As shown in Chapter 2, pp. 11–27, of this report, both the mean age of women at first marriage and the first marriage rate among teenagers are strongly correlated with all outcomes of teenage conceptions, so that generally, the higher the average age at first marriage, the lower the teenage conception rate.

*First marriage rate*

Fig. 21 shows the first marriage rates to women of all ages in Denmark since 1960.



Source: Council of Europe 1997.

**Figure 21** First marriage rate by five-year age groups, Denmark, 1960–1996

Clear similarities can be seen between Figs. 20 and 21. The mid-1960s saw the beginning of a decline in the marriage rate to women under 24, the magnitude of the fall being most marked in the 20–24 age group. The early 1970s saw an increase in the rate of first marriages among women aged 25–29, leading to an upward shift in age at first birth.

*Mean age of women at first marriage*

Mean age of women at first marriage in Denmark since 1970 is described on page 17 of this report. The rate increased steadily from 23.7 years in 1975 to 29.5 in 1996, a rise of almost six years over a 20-year period.

At the same time, the mean age of women at the birth of their first child also increased – from 23.7 in 1970 to 27.5 in 1995. Thus, in 1995 the mean age at first marriage for women exceeded that of age at first child by 1.8 years. Age at first marriage exceeded age at first birth in Denmark, earlier than in any other country in Europe (around 1977).

The proportion of births outside marriage increased from 11 per cent in 1970 to 45 per cent at the end of the 1980s (Roll 1992, p. 22). As discussed in Chapter 2, this is likely to reflect changing attitudes towards marriage. Further evidence for this comes from the fact that, in the late 1980s, of all lone parents in Denmark, only 8 per cent were under the age of 25 (Roll 1992, p. 23).



## Health service provision

Denmark has a well-developed National Health Insurance System (NHIS), with a scheme which provides for all regardless of income (Osler *et al.* 1990). Primary health care is centred around the GP (whose main source of income is the NHIS), with whom the majority of residents are registered.

### Contraception

The Danish Family Planning Association (FPA) was formed in 1956, and since that time policy has focused on adapting legislation to correspond to the attitudes and beliefs of the population (Osler *et al.* 1990). Fertility policy has been liberal, aimed at giving the individual the greatest possible freedom and neither promoting nor reducing population growth. The Danish FPA celebrated its fortieth anniversary in 1996 with a change of name to the Association for Sex and Society – reflecting its change of focus from family planning to sexual and reproductive health rights.

Information, education and consciousness raising relating to contraception have been the core activities of the Danish FPA, and the target groups have been young people and those with special needs. In 1992 the Danish FPA focused on the male role for the first time, including male responsibility in family planning.

Family planning has been included under the NHIS since 1966 (ten years earlier than in the UK) and is available for all regardless of age or income (Søndergaard & Krasnik 1984).

Contraception counselling was introduced by the Mothers' Aid Association\* in 1961 as a means of reducing abortion (Osler *et al.* 1990), and in 1966 adolescents aged 15–18 gained the right to seek contraceptive counselling without parental consent (Osler *et al.* 1990).

In 1978 family planning clinics began to advertise widely, stating that contraception was free to people under the age of 18. Pamphlets were distributed to schools (Paludan 1986), and an initiative was introduced to extend clinic activities to cater for visits from students aged 15–18. The number of school classes visiting increased by over 80 per cent between 1982 and 1985 (Knudsen & Osler 1987), and by 1985 around 25 per cent of clients at family planning clinics were aged 14–19.

In 1986 a pharmacy-based contraceptive information service was launched which aimed to promote the pharmacy as an ideal setting for birth control and to involve pharmacists in contraceptive information provision to the general population. Today, modern contraceptives (including the pill and emergency contraception) are readily available and accessible at pharmacies almost anywhere in Denmark† and are provided to minors without the need for parental consent.

There are no restrictions to the sale of condoms, although they are free of charge only from STI clinics and under special promotions. They are readily available from vending machines in supermarkets and at chemists. Emergency contraception is legal and easily available.

In 1992 a national, anonymous telephone counselling service for young people – Sex Line – was established in Denmark. The aim was to offer counselling to adolescents on contraception, pregnancy, abortion, and STIs. It was well received and approximately half the calls in the first 21 months were on contraception, pregnancy, STIs and abortion.

According to Osler (1990) 'the responsible authorities have provided a well-planned network to achieve an ideal family planning situation in Denmark' (p. 21) and 'the statutory requirements for having an ideal fertility situation with a low number of induced abortions are met' (p. 20). This seems to be verified by the FPA and the Committee on Health Education, who summarised

\*Mothers' Aid is a government-supported private organisation, set up in 1939 to act as an advisory agency and to provide financial support for pregnant women. Local branches were set up all over the country to expand the social aid for single pregnant women and mothers.

†Condoms, spermicidal jellies and creams are available without prescription in pharmacies and other contraceptives are readily accessible from GPs or clinics (Osler *et al.* 1990).



various surveys of the National Board of Health's statistics on the use of contraception and concluded that the status and development of contraceptive use generally looked positive.

### *Abortion*

Termination of pregnancy was decriminalised in Denmark as early as 1937. In 1939 provision was made for abortion on medical, ethical and eugenic grounds 30 years before the UK (Rasmussen 1994) and in 1956 the act was revised to extend medical conditions to include socio-medical indications. At this time however, abortion was not free of charge and the fight for more liberal laws came in 1967, when the Danish Women's Society announced plans to open an office to give women access to names of clinics in Eastern Europe where abortions could be obtained. Public debate and media coverage of this issue escalated along with increasing numbers of illegal abortions. Consequently, in 1970 the law was extended to allow access to abortion on social grounds, which included young age and immaturity. In 1973, following recurrent debates in Parliament, the right of every woman to have her pregnancy terminated up to the twelfth week and under certain conditions after the end of the twelfth week was established (Rasmussen 1994).

Today, access to abortion is generally good in Denmark, with facilities to be found in all counties, so that every woman can have an abortion within 50 km of her home. Abortions are also free of charge, covered by the NHIS, and have become a generally well-accepted form of birth control (Knudsen 1997). An opinion poll in March 1995 showed that 70 per cent of the adult population in Denmark is pro-choice, and only 10 per cent is not.

### *Adolescent needs and services*

Youth clinics are available in every county in Denmark, which was the first country to legalise contraception to women under the age of 15 (the age of heterosexual consent in Denmark). In 1976, GPs were authorised to prescribe contraceptive pills and diaphragms to women under the age of 18 without parental consent. Confidentiality is guaranteed by law. The use of contraception at sexual debut is high in Denmark. Studies have shown that about 80 per cent of 15–16-year-olds used some form of contraception at first intercourse (David *et al.* 1990; Rasmussen & Munk 1986). This figure compares favourably with the UK, where around 50 per cent of boys aged 15 and around 42 per cent of those aged 16 used no contraception at first intercourse; the corresponding figures for women were 45 per cent and 37 per cent respectively (Wellings *et al.* 1994).

Condoms are used most frequently, followed by the pill. Knowledge about sexual matters is derived most frequently from friends, books and school. Information from parents was found to be of little significance to boys but communication with the mother was significant for girls (Rasmussen & Munk 1987).

Abortion for minors is available and accessible and is free of charge, under the same conditions as for adult women. Women under 18 need parental consent. The abortion ratio is high among women under 20 in Denmark. In 1992 there were 1.6 abortions for every live birth in this age group (UN 1996), signifying that the majority of pregnancies in adolescence are unwanted. This suggests that, although contraceptive use is high, effectiveness or consistency in use may not be and thus, despite the well-established services, there is still room for improvement. It also reflects, however, the liberal attitudes and acceptance of Danes towards pregnancy termination as a method of prevention.

### *Sex education\**

Denmark has a long tradition of sex education. It began in some schools at the turn of the century and became widespread by the 1950s. In 1970, it became compulsory in all Danish schools and parents do not have the right to withdraw their children (Risør 1987). The law states that sex education must be integrated into the school's other subjects and provides guidelines for the way in which the teachers should present the topic. It also states that information must be provided on genital anatomy, conception, contraception and STIs (Paludan 1986). Technical aspects of sex education include explanations of how pregnancy

\*Note that a summary table of sex education for all the countries where data could be obtained is given in Appendix 5.



occurs, how different contraceptives function and why different methods work better for different people (Osler *et al.* 1990).

Generally, sex education is well-developed and constantly under review. Studies have shown that lapses in contraceptive use can be only partly attributed to lack of knowledge of how to obtain supplies (Wittrup 1980). A special initiative has been taken by health authorities in Copenhagen to reduce further the rate of induced abortions to women under 19. All ninth grade classes are offered a visit to the family planning clinic as a supplement to sex education at school. Osler (1990) argues that this project has resulted in a 20 per cent decline in the number of abortions in the age group concerned.

Young people also gain knowledge through public education campaigns, and 1988 saw the launch of an AIDS campaign with young people (15–25) as a target audience. The main message aimed to encourage the use of condoms. Young people have also been targeted by subsequent campaigns (1990 and 1992).

### **Cultural openness**

In Denmark the attitude towards sex is pragmatic rather than moralistic. Sexuality and contraception are discussed openly and abortion is not a controversial topic. Eighty per cent of women approve of a woman's right to choose to have an abortion\* (*Reader's Digest* 1991). Indeed, there is widespread support for the current abortion law, and although anti-abortion groups are active, there is a strong pro-choice lobby (Rolston & Eggert 1994).

Most Danes see sexuality as a natural and normal component of a healthy lifestyle for which individuals must assume responsibility through safe and effective contraception. Sexuality and contraception are openly discussed in the media and information is provided to children early and openly (Osler *et al.* 1990).

### **Relating interventions to fertility rates**

Fig. 25 charts changes in the live birth rate to women aged 15–19 and the legal abortion rate to women under 20 since 1960. Annotated on to the graph are summaries of the major events described above which may have had an impact on childbearing among young women.

Just five years after contraception counselling was introduced by the Mothers' Aid Association in 1961, the decline in the live birth rate to women aged 15–19 commenced. Around this time decline also began in the other age groups. Interestingly, in 1966 adolescents aged 15–18 gained the right to seek contraceptive counselling without parental consent, after which the live birth rate in this age group began to fall dramatically. Towards the end of the 1960s the rate continued to decline. This coincided with the time in which pressure groups were fighting for more liberal abortion laws, until 1970 when abortion was allowed on social grounds.

The abortion rate among women under 20 increased quite dramatically at this time, from 8.4 legal abortions per 1000 women aged 15–19 in 1970 to 26.0 per 1000 by 1976 (UN 1996). Later, the rate fell steadily and had reached 15.7 per 1000 by 1987. As abortion and birth rates were falling simultaneously, the fall in the birth rate cannot be accounted for by increasing abortion among this age group. The trend in the abortion rate was reversed in the same year that women under 18 were able to be prescribed contraceptive pills without parental consent.

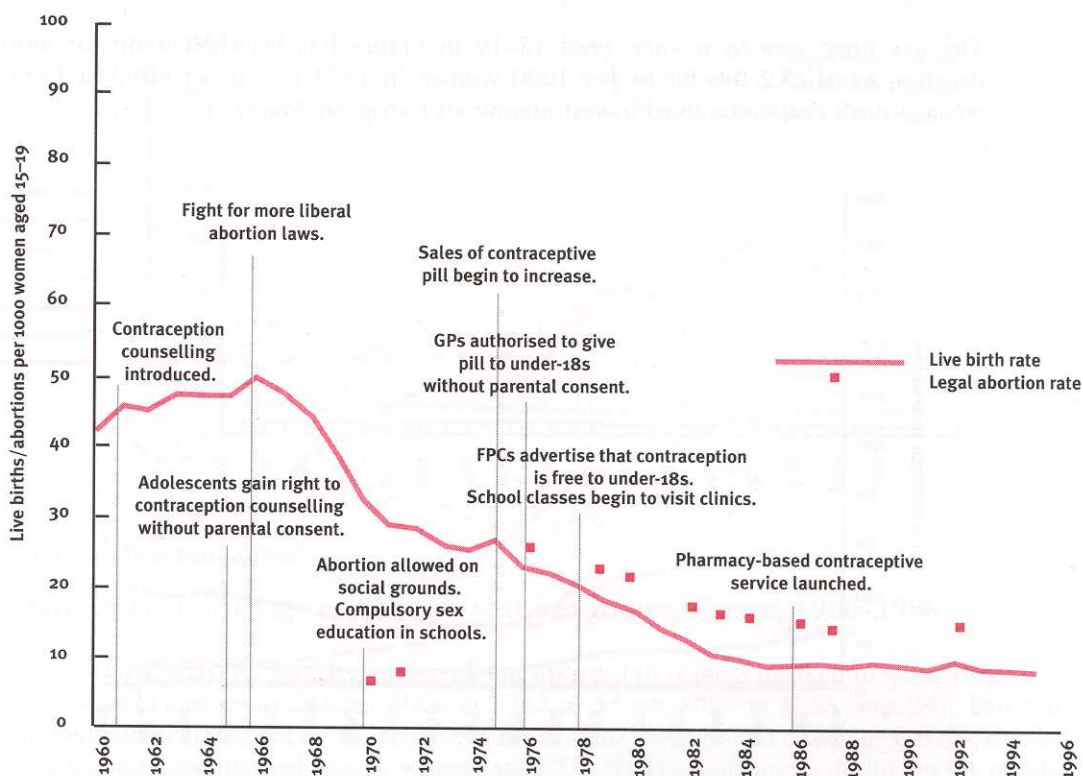
It is clear from the graph that the entire period of rapid decline in the teenage birth rate, from the mid-1960s to the early 1980s, coincided with a large number of events which could have had the effect of reducing unplanned conceptions among young people, including legislative reform, sex education and contraceptive service provision. Of these, the interventions associated with the most marked decline appear to be those which allowed easier access to contraceptive provision by young people. The introduction of the adolescent's right to contraceptive counselling without parental consent coincides exactly with the start of the sharpest decline in teenage fertility rates in the mid-1960s. This decline is more marked than that associated with the introduction of compulsory sex education in schools in 1970. Similarly, authorisation of GPs to provide oral contraception to

\*This compares with 33 per cent in Belgium and 30 per cent in Ireland.



under-18-year-olds without parental consent in 1976, and the same provision for family planning clinics two years later, was associated with a further acceleration in the downward trend.

Thus provision and extension of contraceptive services to young people has clearly been important in reducing teenage pregnancy rates in Denmark. At the same time, it is necessary to bear in mind other interventions which were being introduced almost simultaneously and the possible interaction effects between them. It is noticeable that the decline in the teenage birth rate was sustained in the 1980s in Denmark, in direct contrast to the situation in the UK.



Source: Council of Europe 1997; UN 1965-96.

Figure 22 Live births and abortions per 1000 women aged 15-19 and associated events, Denmark, 1960-1996

## Summary

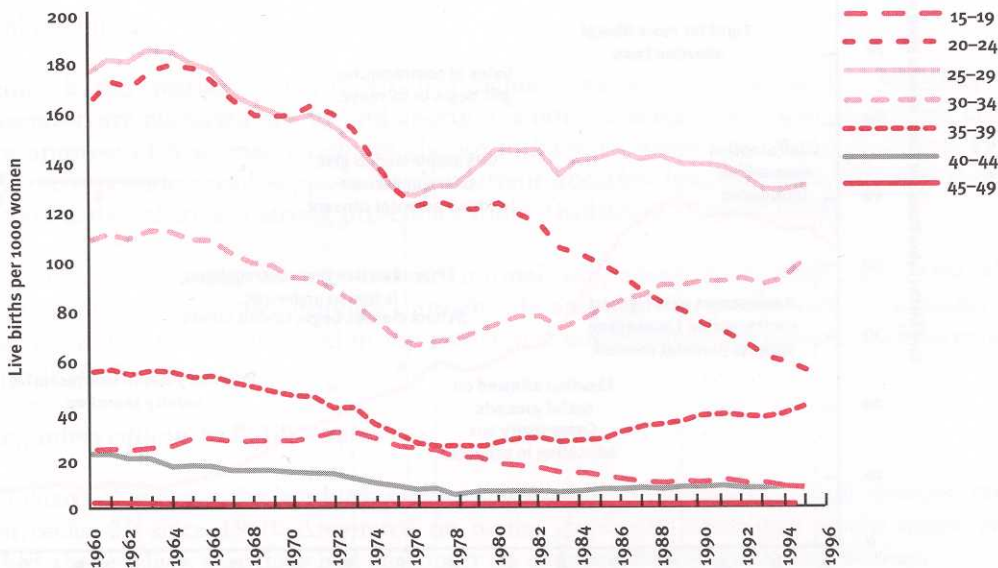
- The live birth rate to women aged 15-19 in Denmark was 8.3 per 1000 in 1995. This ranks seventh lowest in the countries in this review and has decreased sixfold since 1966.
- There has been an overall fall in fertility rates from 2.54 in 1960 to 1.81 in 1995, indicating an overall fall in fertility rates.
- Live birth rates among women in the 20-24 age group have declined, while live birth rates among women aged 25-29, 30-34 and 35-39 have been increasing. The trend has been towards postponement of both marriage and childbearing over the last two decades.
- The number of extra-marital births has increased but cohabitation has also become common, suggesting that many out of wedlock births are planned and wanted.
- Modern contraception is free and easily accessible and family planning services are well-developed. Minors can obtain contraception without parental consent. These factors appear to have been significantly related to the decline in the live birth rate to women aged 15-19.



- Abortion is legal, free, acceptable and easily available. The abortion ratio in women under 20 is high, indicating that the majority of pregnancies to teenagers are unwanted. Despite high quality family planning there still appears to be room for improvement. However, since 1975 the live birth and abortion rates have been falling simultaneously. This suggests that the fall in the live birth rate cannot be accounted for by increasing number of abortions.
- Sex education is compulsory and is well-developed. Sex is discussed openly in society and in the media.

### France

The live birth rate to women aged 15–19 in France has been declining for more than two decades, from 29.2 live births per 1000 women in 1973 to 7.0 per 1000 in 1995. Today the teenage birth rate is the third lowest among all European countries.



Source: Council of Europe 1997.

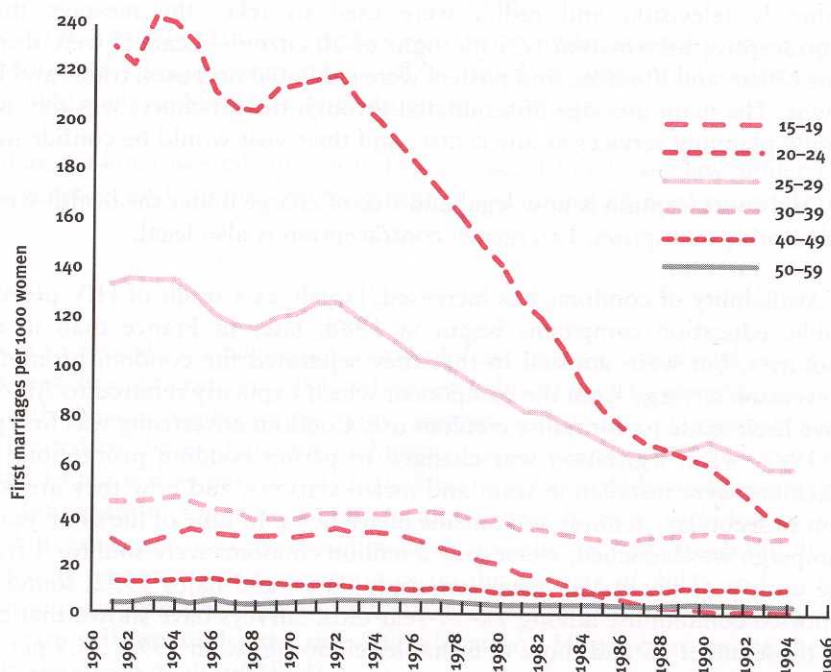
**Figure 23** Live birth rate by five-year age groups, France, 1960–1996

Generally, rates for all age groups began to decline in the early 1960s, although there was some fluctuation among women in their twenties (Fig. 23). This gradual decline continued until around 1976, when it began to reverse in age groups 25–29, 30–34 and 35–39. The overall decline was most marked in the 20–25 age group where it has fallen from 179.0 per 1000 in 1964 to 55.2 per 1000 in 1995. The live birth rate to women aged 15–19 has also seen a steady decline. The total fertility rate fell from 2.73 in 1960 to 1.72 in 1996.

These rates suggest that a postponement of childbearing until after the age of 25 has occurred since 1976. This may to some extent explain the fall in the live birth rates amongst the younger age groups.

## Marriage rates

### First marriage rate



Source: Council of Europe 1997.

Figure 24 First marriage rate by five-year age groups, France, 1960–1996

Age at first marriage has declined in all age groups but is most marked in women aged 20–24 where it has fallen from 242 per 1000 in 1963 to 37 per 1000 in 1995 (Fig. 24). This fall has not been compensated for by an increase in the first marriage rate in older age groups, the decline being second most marked among women aged 25–29. This indicates a decline in the number of first marriages, rather than a shift to later marriage, as has been seen in other countries.

### Mean age of woman at first marriage

The mean age has been increasing steadily from 22.4 years in 1970 to 27.0 years in 1995, an increase of over 4.5 years over a 25-year period.

At the same time the mean age of women at the birth of their first child has also been increasing – from 23.8 in 1970 to 27.9 in 1995. Thus in 1995, the mean age at first child exceeded that of first marriage by just under one year. Indeed, in France the mean age at first marriage has been consistently a year above that of the birth of first child, which suggests that extra-marital births are probably less common in France than elsewhere. There were very few lone parents under the age of 20 in 1989 and only 5 per cent were under 25 (Roll 1992).

Of women aged 16–19 in live-in unions (marriages and cohabitations), 69 per cent were cohabiting in 1985, an increase from 36 per cent in 1975 (Kiernan & Estaugh 1993). A decrease in the marriage rates in this age group is being compensated for by increasing cohabitation rates, which in turn appear to coincide with a delay in childbearing.

## Health service provision

### Contraception

France is a Catholic country, and attitudes towards abortion and contraception have traditionally been hostile and restrictive (Wellings & Field 1996). The manufacture, importation and sale of contraceptives remained illegal in France until 1967 (Jones *et al.* 1986). Even after legalisation, contraception was still difficult to obtain (Gallard 1994). No efforts were made to



make services widely available. In 1974 a law was passed which allowed family planning clinics to provide treatment as well as advice.

In 1981, a high profile and ambitious public education campaign was launched. Mass media, primarily television and radio, were used to relay the message that contraception and contraceptive information was the right of all citizens. Leaflets were distributed in town halls, post offices and libraries, and posters were exhibited on buses, trains and billboards in the major towns. The main message disseminated through the brochures was that minors were entitled to family planning services at any centre, and their visit would be confidential.

Oral contraception is now legal and free of charge under the health service and available with a doctor's prescription. Emergency contraception is also legal.

Availability of condoms has increased, largely as a result of HIV prevention strategies. AIDS public education campaigns began in 1988, later in France than in many other European countries, but were unusual in that they separated the condom promotion component of the prevention strategy from the component which explicitly referred to AIDS prevention. Attempts have been made to normalise condom use. Condom advertising was first permitted on television in 1987, when legislation was changed to permit condom promotion. In 1992, 200 condom machines were installed in train and metro stations, and now they are found in at least 10 per cent of secondary schools and outside pharmacies. In June of the same year a condom promotion campaign was launched, when over 2 million condoms were sold for 1 franc during August.\* In the same year the sexual behaviour study (Spira and Bajos 1992) found a dramatic increase in reported condom use among 18–19-year-olds. Surveys have shown that condoms are used most by those under 25 and those in unstable relationships. In 1995, 78.9 per cent of 15–18-year-old boys and 74.4 per cent of girls reported using a condom at first intercourse, and 72.5 per cent of boys and 51.1 per cent of girls reported using a condom at most recent sexual intercourse.

In 1997, France launched an AIDS public education campaign which tailored HIV prevention messages to a younger audience. Flyers in a style and format closely resembling those for night clubs were distributed at record shops, clubs and bars (Macdowall 1998).

### *Abortion*

Abortion was legalised in France in 1979, after many years of public debate and pressure from feminist groups. Even then, women could obtain an abortion only under certain conditions and all abortions or attempts at abortion remained punishable if not carried out under the strict terms of the law (Gallard 1994). In 1982, under a new left-wing government, the cost of abortion was covered by the social security reimbursement system. This is thought to be a milestone in the evolution of attitudes regarding abortion (see Fig. 28).

In 1987, after a visit by the Pope, the first anti-abortion organisation was set up. The anti-abortion movement in France has since been growing, despite 80 per cent of the public supporting the abortion law. In 1990 the Co-ordination of Associations for the Defence of Abortion and Contraception (CADAC) was set up to raise awareness of the pro-choice arguments. In 1992 it was made an offence to hinder the abortion act. In 1995 French activists staged 20 'clinic rescues', twice the number for 1994.

Today abortion is available under ten weeks on request and under six months if grounds include risk to a woman's life or physical health, risk to foetal health or handicap. A doctor's certificate is needed, and the woman is required to have a week of reflection, but the final decision lies with her (Rolston & Eggert 1994).

There are difficulties in estimating the number of abortions by age in France, and reported rates are not always accurate. The principal reason is that the registration procedures are not strictly enforced in private clinics. It is thought that women in the under-18 group are over-represented amongst unregistered abortions.

\*Condoms are even becoming accepted by the Catholic Church. Recently a senior French bishop backed their use in certain circumstances, such as prevention of spread of AIDS.



In France medical structures aimed specifically at adolescents are unusual (Athea & Rey 1991). Some services are available for young people, but these vary geographically.

Recognition that family planning services were being under-utilised by young people resulted in the introduction of a programme in 1976 aimed at attracting adolescents into clinics, emphasising that they could be seen without an appointment.

The legal age of heterosexual consent is 15, and, according to the law, under-18s are entitled to free contraception and anonymous treatment. Those under 18 need parental consent prior to abortion.

### *Sex education*

The intention to provide sex education to all adolescents was introduced into public policy in 1973. This was strengthened in 1981, when sex education was designed to include fertility regulation with the aim of promoting public awareness of family planning. Sex education was previously limited to the explanation of human reproduction in natural sciences courses for students aged 13 but is now part of the curriculum for 12-year-olds, and contraception is taught at age 14. Information about reproductive physiology is now included in school science textbooks, but education on relationships and sexuality is still generally barred and sex education is only acceptable if it concentrates on the dangers of AIDS and on the dangers of sexuality without the mention of pleasure (Gallard 1994). In 1985 sex education was introduced into the primary syllabus under the title 'life education'. However some see these activities as inadequately resourced (Gallard 1994).

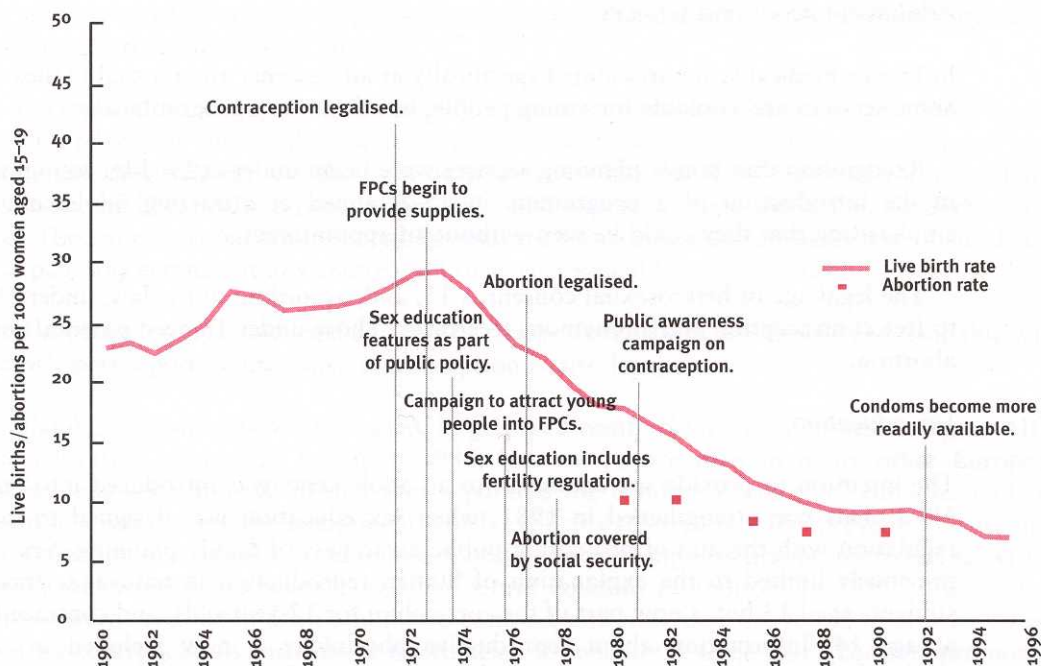
A recent survey of 15–18 year olds showed 55 per cent to be sexually active: 47 per cent of boys and 41 per cent of girls had had sexual intercourse; 75 per cent of the 18-year-olds were sexually active compared to 30 per cent of 15-year-olds (Spira *et al.* 1992). Overall, 10 per cent used no contraceptive protection the first time they had sex. In 75 per cent of cases the couple used a condom, and in 20 per cent the girl was taking oral contraceptives (Spira *et al.* 1992). As girls developed a more regular sex life, oral contraceptive use increased and condom use decreased. Interestingly, those who attended high school were significantly more likely to use condoms than those who did not, perhaps indicating the influence of sex education. About 40 per cent of boys and 27 per cent of girls had sex with more than one partner during the 12 months preceding the survey. Over 12 per cent of boys and five per cent of girls had five partners or more (Patel 1995).

### **Relating interventions to fertility rates**

Fig. 25 illustrates changes in the live birth rate to women aged 15–19 and the legal abortion rate to women under 20 since 1960. Annotated on to the graph are summaries of the major events described above which may have had an impact on childbearing to young women in this age group.

The period of most rapid decline in teenage fertility coincides with a period of energetic activity in terms of sexual health service provision. Contraception was legalised comparatively recently in France (in 1972) but the ensuing decade was marked by numerous events of significance, relating to the legislation for abortion, a recognition of the need for sex education, introduction and expansion of family planning services and efforts to encourage contraceptive use by young people. The suggestion of a reversal in the downward trend is abruptly halted by the increased availability and greater public awareness of condoms as a result of efforts to encourage their use in the context of HIV prevention.





Source: Council of Europe 1997; UN 1965–96.

**Figure 25** Live births and abortions per 1000 women aged 15–19 and associated events, France, 1960–1996

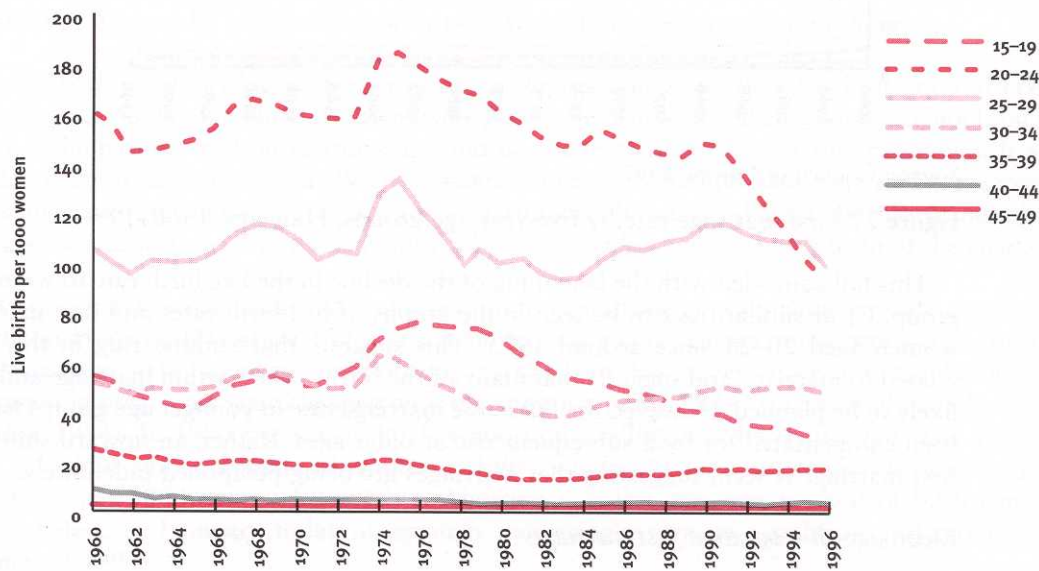
### Summary

- The live birth rate to women aged 15–19 has fallen since 1973, and at 7.0 per 1000 in 1995 is now the third lowest of all the countries in this review. Total fertility has decreased more than fivefold from 2.73 in 1960 to 1.72 in 1996.
- Marriage rates to women aged 15–19 have also been falling since the mid-1970s and are currently very low (2.1 per 1000). Given that the fall in the live birth rate and the first marriage rate occurred simultaneously and follow similar patterns, the former may well be explained by the latter – given that extra-marital births are relatively uncommon in France.
- Despite the fact that today contraception (including emergency contraception) and abortion are legal, free and readily accessible, public health efforts in this area lagged behind those in many other European countries. Contraception became legal only in 1972 and family planning clinics have only provided methods since 1974.
- The decline in the live birth rate to women aged 15–19 began around 1973, coinciding with the introduction of sex education, legalisation of contraception and provision by family planning clinics of supplies as well as advice.
- The sharp decline in the teenage fertility rate since the early 1970s, which coincided with an eventful decade in terms of provision, has further been sustained in the context of infection prevention efforts relating to HIV.

Hungary

Here, the teenage fertility rate fluctuated during the 1960s and then began to increase from 50.0 live births per 1000 women in 1970 to a high of 73.8 in 1979 (Fig. 26). After this time, it began to decline steadily. Today the rate is 29.5 per 1000, still relatively high (ranking fifth) in comparison with the rest of Europe. Hungary is interesting because of its relatively late decline in the teenage birth rate. Furthermore it was felt important to include an Eastern European country in the analysis, because socio-demographic factors were likely to differ from those in the rest of Europe.

The live birth rate to women of all ages since 1960 is shown in Fig. 26. This allows an appreciation of the changing birth rate to teenagers to be seen in the context of changing fertility trends as a whole.



Source: Council of Europe 1997.

Figure 26 Live birth rate by five-year age groups, Hungary, 1960–1996

Birth rates in Hungary are higher for most age groups than those seen in Western Europe. The total fertility rate was 1.21 in 1996, a fall from 2.31 in 1960. Generally, rates have remained stable in the three oldest age groups (35–39, 40–44 and 45–49) and have fluctuated without any overall rise or decline in age groups 25–29 and 30–34. In 1975 a steady decline among age groups 20–24, 25–29 and 30–34 began, which was sustained in the 20–24 and 25–29 age groups until 1992, when the trend began to plummet.

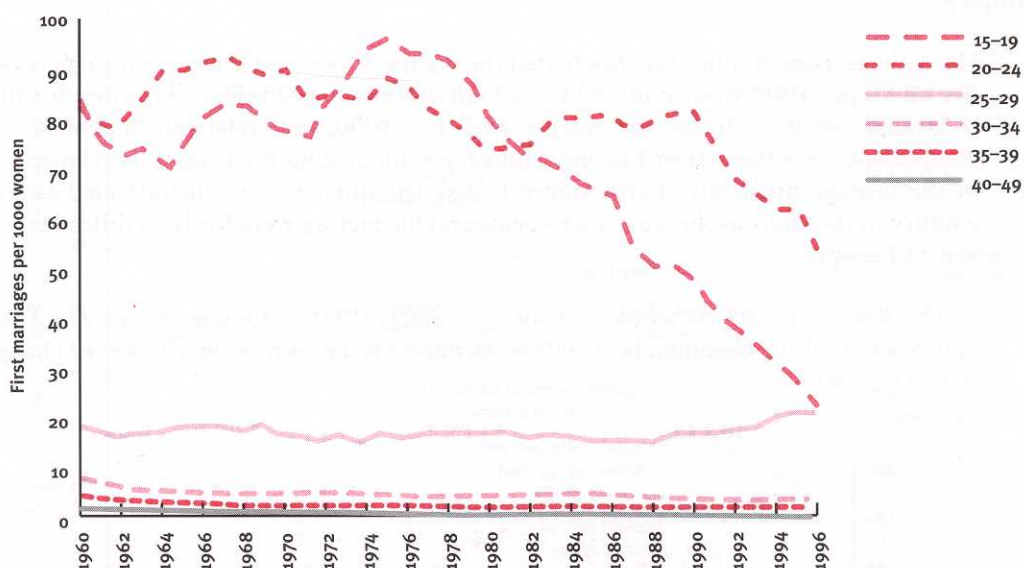
Marriage rates

First marriage rate

Fig. 27 overleaf shows the first marriage rates to women of all ages in Hungary since 1960.

Figure 27 shows that the first marriage rate to women over 25 has been relatively stable over the last 26 years, although the rate in the 25–29 age group increased slightly during the 1990s. By contrast, in the younger age groups, rates have declined since the mid-1970s. The fall has been dramatic amongst 15–19-year-olds, from 95.5 first marriages per 1000 women in 1975 to 22.1 per 1000 in 1996.





Source: Council of Europe 1997.

**Figure 27** First marriage rate by five-year age groups, Hungary, 1960–1996

This fall coincided with the beginning of the decline in the live birth rate to women in this age group. Clear similarities can be seen in the graphs of live birth rates and first marriage rates to women aged 20–24 since around 1975. This suggests that childbearing in this age group is related to marriage and suggests that many of the births occur within marriage and are therefore likely to be planned. However, the fall in the marriage rate in younger age groups has not entirely been compensated for by a subsequent rise at older ages. Rather, an upward shift in the age at first marriage is seen, suggesting that marriages are being postponed indefinitely.

#### *Mean age of woman at first marriage*

This fell from 21.9 in 1960 to 20.7 in 1974 and then began to increase steadily to 22.2 in 1995. The mean age of women at the birth of first child increased and remained fairly stable at around 24.5 between 1970 and 1980, when it began to rise steadily to 25.5 in 1995. In 1995 the mean age at first child still exceeded that of first marriage, indicating that extra-marital births to young women were still likely to be quite rare.

### **Health service provision**

#### *Contraception*

In 1956, the production and sale of low-price contraceptives was ordered in Hungary. The rationale was the need to protect women's health and provide choice in family planning. However, it was some time before reliable methods became readily available.

In 1973 Hungary adopted a policy to promote use of oral contraception and intra-uterine devices (IUDs) and to increase their availability. This year also saw the introduction of family and women's centres (which in fact were family planning clinics) run as part of the National Health Service. Availability of modern contraception improved free choice significantly. The population policy of 1983 was aimed at prevention, rather than interruption, of unwanted pregnancy, and the measures taken have resulted in more effective contraceptive practices and have reduced considerably the reliance of Hungarian women on abortion (Sachdev 1988).

In 1992 a family welfare system was planned to help spread knowledge of contraception and family planning. Today, reliable contraception continues to become increasingly more readily available. The mid-1980s saw the launch of a progesterone-only emergency contraceptive pill (Postinor) aimed at women experiencing infrequent sexual intercourse (predominantly young unmarried women) or those routinely using a less effective method of birth control. As currently used in Hungary, it represents a different approach to emergency contraception.



Postinor was heavily promoted as the ideal method of contraception for young people and can be purchased (after obtaining a prescription from a public health physician) over the counter in pharmacies. Sales increased rapidly, although cost may be a barrier to adolescents (Camp 1995). Although there are no national data on the users of emergency contraception, the overwhelming majority are thought to be unmarried young women (Camp 1995).

### *Abortion*

In 1956 a liberal abortion legislation was created which defined access to abortion as a basic right.\* In 1973 the law was tightened, requiring that women seeking an abortion have three or more children or two children plus at least one more obstetric event. Abortion on the basis of medical indication remained free and fully covered by the insurance system but a more stringent condition for establishing medical indication was introduced. In 1989 and again in 1993 the law was relaxed and abortion is now authorised up to 12 weeks if the woman is considered to be under 'severe stress' (Balogh and Lampe 1994). The fee has been set at roughly the equivalent of US\$60 but this can be reduced to half or even waived in exceptional circumstances.

In 1992 a new act (which came into force at the beginning of 1993), the Protection of Foetal Life Act, was adopted in Hungary. Steps were planned which included education in schools on the value of human life and on relationships and on the methods of terminating pregnancy. It also made abortion more restricted. Women became entitled to free prenatal care and a pregnancy allowance was introduced as a new form of support. It was paid after the fourth month of pregnancy and was equal to the amount paid in family allowance after the birth of the child.

As in other Eastern European countries, there is a strong pro-abortion attitude among the public in Hungary (Pongracz 1991) and a subsequent ready reliance on abortion as a form of contraception. The number of abortions carried out has fallen since the regulations for terminating pregnancy were changed with the adoption of the 1993 Protection of Foetal Life Act (Berkik 1994). In 1990 there were 90,394 abortions, falling to 74,491 in 1994. The abortion rate is highest among unmarried women and those under 20. Of those under 20 there were 91 abortions per 1000 live births in 1994. Abortion is still a common method of birth control. Nevertheless, in Hungary today abortion is increasingly seen as a political and moral issue (Pongracz 1991).

Hungary's population has been decreasing since 1981. To better understand the relationship between abortion laws and population growth, a study involving 1000 people was commissioned by the Hungarian Demographic Research Institute. The study showed that many take the view that the government should not be allowed to interfere with a woman's right to choose, although some felt that the interests of the partner should be considered. It was also reported that the government should not solve the problem by restriction of the system of permission, but should offer education and contraception (Pongracz 1991).

### *Adolescent needs and services*

Little information can be found on the provision of special adolescent services for young people in Hungary. Generally, in the countries of Central and Eastern Europe there is a need for a system for the delivery of high-quality family planning services. To increase contraceptive prevalence in the countries in this region, the establishment of extensive education programmes, family planning methods and other aspects of reproductive health for their health professionals, consumers and representatives of the media have been recommended (Kovacs 1997). Furthermore, it is recommended that sex education in schools be encouraged.

A recent national survey of adolescents was conducted in Hungary. It included questions on knowledge, attitudes and behaviour regarding sexuality and a main aim was to assess the impact of sex education (Forrai 1996).

This study indicated that knowledge of contraception among young people aged 14–19 was generally poor and that contraception was not widely accepted among them. Forrai (1996) argues that the low level of knowledge about sex among the current generation of Hungarian

\*For full details of the current abortion law in Hungary, see Balogh & Lampe (1994, p. 147–8).